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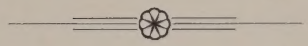

ROSE POLYTECHNIC INSTITUTE,

Terre Haute, Indiana.

JUNE, EIGHTEEN HUNDRED AND NINETY-TWO.

TERRE HAUTE, IND.:
MOORE & LANGEN, PRINTERS AND BOOKBINDERS.
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ANDERSON CARNEGIE

To the fair ones who have

Applauded us,

Beguiled us,

Loved us,

And dropped us,

This volume is affectionately dedicated

by the

Class of '92.

Introduction.

NOT with the intention of startling the literary world, nor with the hope of building a great monument of fame, did the class of '92 undertake to publish this semi-"souvenir," semi-"annual" volume. Rather with the desire of placing in tangible form many interesting historical facts relating to the Institute and many destined traditions, referring to associations therein, was the task begun. The venture, new in all its details, presented a variety of difficulties, all of which combined to multiply the physical and mental exertion anticipated. Not the least of these was the great amount of time involved. From September to June, the Poly's one cry is for Time; for the Senior, engaged in finishing up the course, it seems that no diversion from actual duty, even for a day, is possible. Under these exacting conditions, work upon this volume was prosecuted. Naturally, imperfections in many directions have resulted. For these we ask your most charitable consideration, desiring to be credited with an ambition to publish a volume in which each friend and student of the Institute might feel an interest. To all who have so kindly aided us in our undertaking, we extend our sincerest thanks, freely acknowledging the futility of our purpose had this assistance not been forthcoming. To those who may see some degree of merit in the souvenir we now present, we bow in deepest reverence.

The Only Colors:--

OLD ROSE AND WHITE.

The Only Yell:--

R—P! R—P! RAH—RAH! RAH—RAH!
R—P! R—P! RAH—RAH! RAH—RAH!
HOO—RAH! HOO—RAH!
ROSE POLYTECHNIC
RAH! RAH! RAH!

THE INSTITUTE.

The Old Rose and the White.

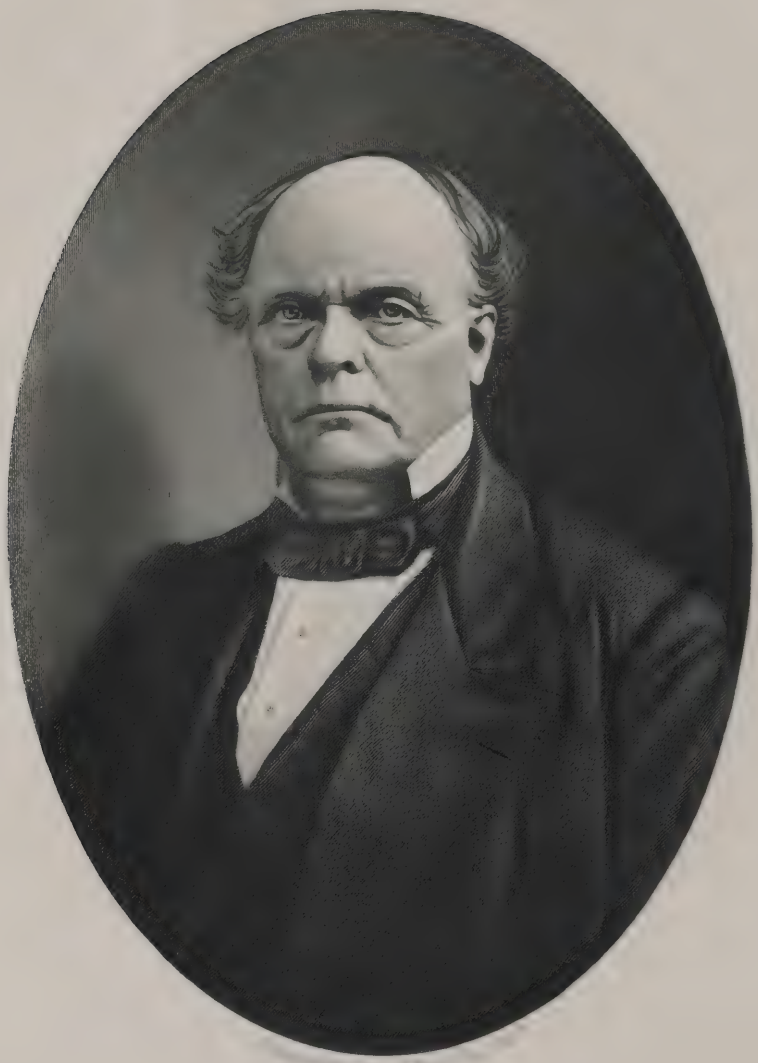
NOW come old friends, and gather round,
And let your voices ring,
And of our famous Institute
The praises we will sing.
Adversity can ne'er us part,
All care and trouble we defy;
Thro' life we go with bravest heart,
And true we'll be for aye.
Now come old friends and gather round,
And lend your voices light
To cheer the days we spend beneath
The Old Rose and the White.

CHORUS—
R. P!—R. P! Rah! Rah! R. P!—R. P! Rah! Rah!
We shout with all our might,
The tried and true defenders
Of the Old Rose and the White.

Full well we know the sons of Yale
And Harvard lead the way,
That first the crimson, then the blue
Is master of the day.
The Princeton orange and the black,
The tiger guards with watchful care,
The praise of deeds on fields and track
Is sounded everywhere.
And now, my boys, we'll do our best,
We'll ne'er give up the fight,
But strive to keep an honored place
For the Old Rose and the White.
CHORUS—

A few short years will swiftly glide,
Our duties will be done;
Our college tasks we'll lay aside,
By other hands begun,
But other hearts will be instilled,
With pride and strength and loyalty.
We know our places will be filled
By others true as we;
And when the old familiar scenes
Again shall greet our sight,
Once more we'll toast with three times three
The Old Rose and the White.
CHORUS—

S. W. WHEELOCK.



Chauncey Rose

Chauncey Rose.

CHAUNCEY ROSE was born in Wethersfield, Conn., Dec. 24, 1794, where he received a common school education. In 1818 he located in Terre Haute, then consisting of but a few log huts, and lived here, with the exception of a few years, till his death, Aug. 13, 1877. His industry and well-known integrity, guided by intelligence and an understanding of the future, won for him a large fortune. Mr. Rose never married, and he seemed to consider his vast fortune as being held by him in trust for the public. He devoted it to the good of his fellow men, the most of it to the relief of immediate distress and the welfare of the unfortunate. He never courted notoriety in his giving; on the contrary, so quietly and secretly did he perform his charities that no likely estimate of his benefactions can be made. His best sympathy was with the young men of talents and enterprise who had to battle with adversity, and his especial desire was to help them. He gave the subject much thought and talked it over with other men, and decided that the best service he could render them would be to provide for them a schooling which would blend the industrial sciences with the branches of knowledge best suited to such a course. It was the working out of this idea which resulted in his endowment of the Rose Polytechnic Institute.

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Rose Polytechnic Institute.

THE ROSE POLYTECHNIC INSTITUTE originated with Chauncey Rose prior to 1874. The body corporate formed under the laws of Indiana on the 10th of September of that year, took out articles of incorporation for the establishment of an institution for the intellectual and practical education of young men, to be known as the "Terre Haute School of Industrial Science," and to be administered by a board of managers. On the 10th of October the board was organized, and a committee appointed to mature plans. On the 11th of January, 1875, the corner stone of the main edifice was laid with appropriate ceremonies and addresses, and the name changed to "Rose Polytechnic Institute," a change persistently opposed by Mr. Rose.

Gifts to the amount of over $300,000 had been made to the Institute at various times up to June 2d, 1877, when Mr. Rose resigned from the board. He died on August 1st, leaving a specific bequest to the Institute of $100,000, and constituting the same his residuary legatee.

The Institute was opened on the 7th of March, 1883, under President Charles O. Thompson. The school has grown in accordance with plans at first laid down. There has been little expansive, but considerable intensive development. The curriculum at first embraced courses in Mechanical Engineering, Civil Engineering and Chemistry, and to these has been added only a course in Electrical Engineering. This policy consistently pursued has raised the school, we may certainly say, to the first rank of special schools of applied science. The grade in the general departments, obligatory upon all students, has been constantly raised. Much better preparation and more maturity are now necessary to enable students to undertake and complete the course successfully. The average age of candidates

for the Freshman class is now eighteen or over. In spite of added requirements, the number of students has increased from year to year, and the limit to the capacity of the lower classes has long since been reached.

The Institute has had three Presidents: Dr. C. O. Thompson serving two years, Dr. T. C. Mendenhall three years, and the present incumbent, Dr. H. T. Eddy, about two years. An interregnum occurred after the death of President Thompson, and another after the resignation of President Mendenhall. These seem, however, to have produced no serious consequences, the Faculty in each case having distributed the President's duties among themselves, and successfully performed them.

Changes in the Faculty have been quite frequent, but one member of the Faculty as existing in March, 1883, being still connected with the Institute. The additional Faculty positions, Instructor in Physical and Engineering Laboratories, and Junior Professor of Drawing, have been created since 1889.

Students come to the Institute from almost all parts of this country as well as from others. Students have entered from Canada, United States of Colombia, Japan, Russia; and in our own country from California, Colorado, Utah, Washington, Oregon, Dakota, Florida, Arkansas, Texas, Connecticut, New York, Pennsylvania, and from all the neighboring States. The proportion of students from Terre Haute varies from 12 to 20 per cent. of the total enrollment, being now about 13 per cent.

The Institute is the only exclusively engineering school in this part of the country, although many of the other colleges have technical courses. There are more colleges of this character in the east, but it may be said that the United States is behind the European nations in regard to the number of scientific schools. Belgium has founded thirty-six industrial schools, with an attendance exceeding twenty-five thousand; in both England and Belgium the number of pupils in proportion to the population is about the same—that is, forty-two to each one thou-

THE CHEMICAL LABORATORY AND SHOPS.

sand population. In Holland there are thirty-two industrial and twenty-five professional schools, attended by about seven thousand pupils. Switzerland has no less than eighty-seven schools, with an attendance of eight thousand.

In Denmark there are seventy-seven schools, with more than six thousand pupils. The technical school at Copenhagen alone has no less than two thousand students enrolled. In Sweden there are twenty-eight industrial schools; that at Stockholm has eight hundred students. Italy, in 1885, had one hundred and thirty-six industrial and art schools.

It is impossible that the United States should long be content to follow where others lead. The growing interest in and demand for schools of manual training in our cities, in connection with the public schools, is an evidence of this. The work-shop departments constantly being added to technical schools already established are practical demonstrations of the value to an engineer of practical acquaintance with handicraft and with the machine-shop in general.

The Institute certainly has won a place, and an advanced one, among American institutions of its class. Its success is demonstrated not only by the large and constantly increasing number of applicants for admission each year, but by the readiness with which graduates find good and responsible positions on the completion of their courses, and by the success they meet with in every branch of engineering life.

The Three Presidents.

DR. THOMPSON.

Charles Oliver Thompson, A. M., Ph. D., entered formally into the office of President of the Rose Polytechnic Institute on March 7th, 1883. He was at that time 47 years old. He died on the 17th of March, 1885, having thus been connected with the Institute but little over two years. A period short indeed, yet long enough at that time in the life of the school to leave a permanent impress of his character upon it. This he did by laying out the general plan of instruction, selecting the first faculty, and fixing and inaugurating in general, the system of management which has not been greatly departed from since. Dr. Thompson was, above all things else, a teacher. Whatever his achievements as a scientist may have been, and they were not inconsiderable, they were yet overshadowed by ability in this respect. He had much of the Emersonian practical philosophy about him, that made him most at home when talking to a body of young men on their own future, planning for them their studies and courses, and giving them hints on the formation of character and the best means for achieving success. For teaching, the breadth of his character and training, his many-sidedness were elements of success. Dr. Thompson was indeed a broad-gauge man, made so by the nature of his training, by his occupations and natural tendencies. His education was scientific and technical, but yet laid upon a broad foundation of classics and history. He had been a teacher of Greek and Latin, and a civil engineer. He was well acquainted with the art of literary criticism, yet he spent much of his energies as a commercial chemist in the laboratory. This kind of training and this variety of occupation is good for the teacher, but not calculated to develop the trained specialist in advanced science. It *is* calculated to develop the trained specialist in advanced pedagogy.

Charles O. Thompson
T. C. Mendenhall
Henry P. Eddy

It was Dr. Thompson who fixed upon the Institute that uncompromising adherence to the rule of impartiality in the judging and classifying of students. There was never to be, and there never has been favoritism; rich and not so rich, sons of workmen and sons of benefactors of the Institute were to fare and have fared alike.

Dr. Thompson had a strong leaning toward the classics of literature. He was fond of Horace, he loved Burns; he gave his children literary training, and had he remained with the school, it is probable its literary side would have been more fully expanded.

DR. MENDENHALL.

Thomas C. Mendenhall came to the Institute in 1887, and immediately captured all hearts. His genial presence has hardly yet disappeared from the halls of the Institute, and it is scarcely fair to ask us to pass a word of judgment upon him. He is still of us and among us.

Dr. Mendenhall is essentially a scientist; whatever abilities he may have possessed as a teacher, and we are not likely to underrate those, he was yet still more eminently a scientist than a pedagogue. Clear and exact science, accurate conceptions, for every thought a picture in the mind and a model in the hand, these are characteristics of the kind of thought in which he delighted; the hazy, the mystical, the metaphysical, he therefore avoided. His thought was rapid, his judgment quick and remarkably correct. Even in the judgment of character he seldom erred, yet, we are bound to say, in this, we think, he proceeded rather by intuition than by clearly defined methods. He had not any great tendency to Emersonian character analysis. He was accustomed to lecture on meteorology, on earthquakes, on almost anything that was outward, clearly defined and not to be mistaken. There is no mistaking the value of his influence upon the school. It was in the direction of exactness. Science is based upon a system of exact weights and measures,

and the truly scientific man can abide nothing that does not fit its place. It was not true that you could hear, as Holmes has said, the cog-wheels working in his brain. They were so perfectly meshed that there was no sound connected with their motion. Dr. Mendenhall resigned from the Institute in 1890 to take charge of the U. S. Coast and Geodetic Survey, a position in which his signal ability as a scientist will find a more extensive field for practical application.

DR. H. T. EDDY.

Dr. Eddy, who succeeded Dr. Mendenhall in 1891, at the zenith of the latter's popularity in the school, has had, for that very reason, a difficult position to fill. There is nothing more difficult than to successfully follow a man who has resigned when at the height of success, who has, as it were, gone off in a blaze of glory, and carried all thoughts with him into an uncertain region of indefinite possibilities. Such a man has not only reaped the crop of his own cultivation, but he has exhausted the fertility of the field, to a certain extent, for response to succeeding efforts in the same direction.

Dr. Eddy has been successful, and, for the short time he has been in the Institute, that is saying a great deal. He has been called upon to decide several questions which could not have been decided so as to please every one, and we think it will be found that, in the long run, his decisions are not only for the best interests of the school, but also for the best interests of the student himself.

Dr. Eddy is a scholarly man, a student of books; perhaps inclined a little to abstract speculation, yet thoroughly practical in school affairs. Somewhat reserved and undemonstrative by nature, we think his warm interest and sympathy with the students, in whatever they undertake, has been abundantly demonstrated. With such a man at its head, there is no fear but that the Institute will develop as rapidly and progressively as could be desired.

THE FACULTY.

The Faculty.

HENRY T. EDDY, C. E., Ph. D.,
President.

WILLIAM L. AMES, B. S.,
Professor of Drawing and Descriptive Geometry.

JAMES A. WICKERSHAM, A. M.,
Professor of Languages.

WILLIAM A. NOYES, Ph. D.,
Professor of Chemistry.

MALVERD A. HOWE, C. E.,
Professor of Civil Engineering.

CARL LEO MEES, M. D.,
Professor of Physics.

THOMAS GRAY, B. Sc.,
Professor of Dynamic Engineering.

CHARLES S. BROWN, Ph. B.,
Professor of Steam Engineering and Machine Design.

ARTHUR S. HATHAWAY, B. S.,
Professor of Mathematics.

WILLIAM H. KIRCHNER, B. S.,
Junior Professor of Drawing.

EDWIN PLACE, B. M. E.,
Instructor in Physical and Engineering Laboratories.

ROBERT L. McCORMICK, B. S.,
Instructor in Mathematics and German.

WILLIAM H. KIRCHNER, B. S. . . . . Librarian
MRS. S. P. BURTON . . . . . Registrar
MISS HANNAH F. SMITH . . . . . Assistant Librarian

Instructors in the Shops.

Charles S. Brown, Ph. B. . . . . Superintendent
Garrett W. Logan . . . . . Instructor in Machine-work
William P. Smith . . . . . Instructor in Wood-work
Thomas O'Loughlin . . . . . Instructor in Forging and Tempering
Harry W. Dickinson . . . . . Instructor in Foundry Practice
Benjamin Grosvenor . . . . . Engineer, and Instructor in Engine and Boiler Management.

Biographical.

THE PRESIDENT.

Henry T. Eddy was born at Stoughton, Mass., June 9th, 1844; was fitted for college at North Bridgewater (now Brocton), Mass.; in 1867 received the degree of A. B. from Yale; in 1868 that of Ph. B. from the Sheffield Scientific School; in 1870 that of A. M. from Yale; in 1870, also, that of C. E., and in 1872 Ph. D., both from Cornell University. He has taught as instructor in field practice in the Sheffield Scientific School, 1868; instructor in Mathematics and Latin, University of Tennessee, Knoxville, 1868–69; assistant professor of Mathematics and Civil Engineering, Cornell University, 1869–73; associate professor of Mathematics, Princeton College of New Jersey, 1873–74; professor of Mathematics, Astronomy and Civil Engineering, University of Cincinnati, 1874–90, where he was Dean of the Academic Faculty, 1874–77 and 1884–90. He was president-elect of the University of Cincinnati in 1890, and became President of Rose Polytechnic Institute in 1891. Spent the year 1879–80 in study abroad—one semester at Berlin, under Kirchhoff in Mathematical Physics, and under Helmholz in Physical Laboratory, the other semester attended lectures at the Sorbonne, at Paris. Vice-President American Association for the Advancement of Science for Section A. (Mathematics and Astronomy) at the Philadelphia meeting, 1884. Member of the Am. Phil. Soc. Author of several books and many papers published in scientific and technical journals.

PROFESSOR OF DRAWING.

William L. Ames was born at Kingston, Mass., in 1855; received his preparatory training in the public schools of that place. From 1873–76, was with the Macon Locomotive Works, Taunton, Mass., and from 1876–79, with the Old Colony Rivet Works, Kingston, Mass. From 1879–82, was a student of the Worcester

THE LIBRARY.

THE PHYSICAL LABORATORY.

Polytechnic Institute, receiving the degree of B. S. on graduation. During the year 1882–83, was a student in the Shool of Design, Cincinnati, Ohio. Since March, 1883, has been connected in present capacity, with Rose Polytechnic.

PROFESSOR OF LANGUAGES.

J. A. Wickersham, born 1851, near Wilmington, Ohio, received early training in the public schools of Harper, Iowa, and in the preparatory department of the University of Kansas. Graduated from the University of Kansas in 1876, with the degree of B. S., having done special work in Greek. From '76 to '78, was instructor of Greek and Latin in that University, took the degree of Arts in 1878, and was elected to the chair of Greek. Did not, however, undertake the duties of that position, but resigned, and from '78 to '81 was a student of Philosophy at Leipsig, Berlin and Tübingen. In 1881, was, for a short time, principal of the schools of Franklin Falls, N. H., published "Poems," and "Aliso and Achne," N. Y., and entered Rose Polytechnic Institute in 1883.

PROFESSOR OF CHEMISTRY.

William A. Noyes was born in 1857, on a farm, near Independence, Iowa; was graduated from Iowa College, Grinnell, Iowa, in 1879, taking degrees in both Arts and Science. During the fall of '80 had charge of the Chemical Department of Iowa College in the absence of the Professor. In January, 1881, went to Johns Hopkins University, and took the degree of Ph. D. there, in 1882. During 1882–83 was instructor in Chemistry in the University of Minnesota, and during the three years 1883–1886 was professor of Chemistry in the University of Tennessee, at Knoxville. In the summer of 1886 came to the Rose Polytechnic. During the winter and spring of 1889 had a leave of absence which was spent in work with Professor V. Breyer, in Munich. Has published a number of scientific articles, and written a book on qualitative analysis.

PROFESSOR OF CIVIL ENGINEERING.

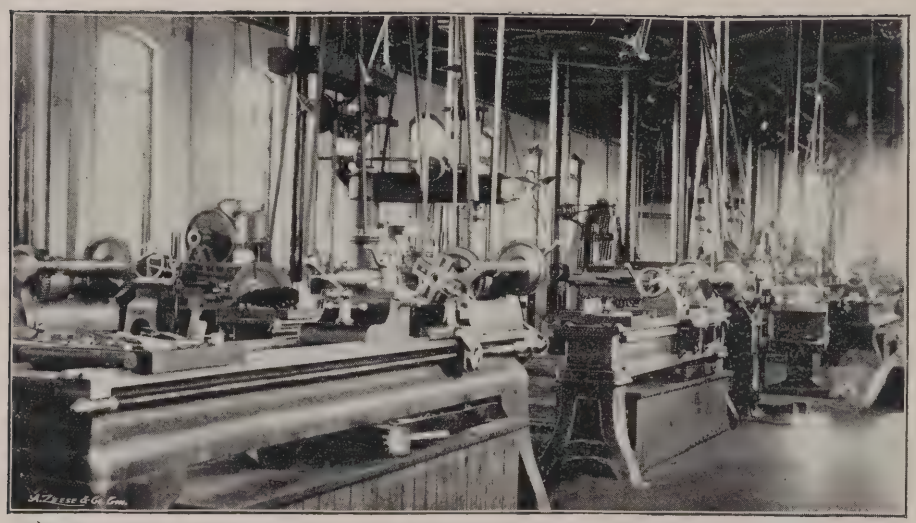
MALVERD A. HOWE was born in 1863, received the degree of B. S. from Norwich University in Vermont in 1882, that of M. S. from the same university in 1888; that of C. E. from the Thayer School of Civil Engineering, Hanover, N. H., in 1886. Taught during the year 1882–83 as second master in the Vermont Episcopal Institute of Burlington; during the year 1886–87 in Lawrence Scientific School at Harvard University, and in 1887 entered Rose. Is a member of the Engineers' Club of St. Louis, and an associate member of the American Society of Civil Engineers. Is the author of several books and pamphlets.

PROFESSOR OF PHYSICS.

CARL LEO MEES, born in Columbus, Ohio, May 20, 1853, was graduated at Ohio University and at Starling Medical College in 1875, meanwhile, in 1870–75, holding the office of Assistant Chemist of the Ohio Geological Survey. Was then called to the Professorship of Chemistry and Physics in the Louisville, Ky., schools where remained until 1880, after which spent some time in study at the Imperial Institute, Berlin. In 1882 became Professor of Physical Science in Ohio University and in 1887 was called to the chair of Physics in Rose Polytechnic Institute. Is a member of scientific societies and in 1887 was secretary of the physical section of the American Society for the Advancement of Science, of which has been a fellow since 1876.

PROFESSOR OF DYNAMIC ENGINEERING.

THOMAS GRAY, born in Scotland in 1850, was educated in the public schools, the Watt Institution, Edinburg, and the University of Glasgow. Was graduated from the latter institution as B. S. and C. E. For three years, 1878–81, taught electrical engineering in the Imperial College of Engineering, Tokio, Japan. From 1881 to 1888 was assistant to Sir William Thomson and Prof. Jenkin. While with them was their chief representative as engineer in the construction and laying of



THE MACHINE SHOP.

THE WOOD SHOP.

the Commercial Cable Company's system of trans-atlantic and other cables. In 1888 came to America to assume his present duties in R. P. I. Is the author of thirty-five or more papers and pamphlets on various scientific subjects, all recognized as authority.

PROFESSOR OF MACHINE DESIGN AND SUPERINTENDENT OF SHOPS.

Charles S. Brown, born in Connecticut, August, 1860, was graduated from the Sheffield Scientific School of Yale in the mechanical engineering course with degree of Ph. B. in 1883. Was constructing engineer for the Blake Crusher Co., New Haven, Conn., until 1887, doing mining mill work, fine crushing and concentration of ores. During 1887-88 was assistant engineer for the Metropolitan Street Railway Co., of Kansas City, Mo., in the construction of cable railways. Became connected with Rose Polytechnic Institute in September, 1888.

PROFESSOR OF MATHEMATICS.

A. S. Hathaway, graduate of Cornell University of '79. During undergraduate course in that institution contributed a number of articles on mathematics to the *Analyst*, and was sent by Cornell as its representative to the Inter-collegiate contests at New York City, where he won the first prize. After graduation became a teacher in mathematics in the Friends' High School, Baltimore, for a time. Then turned attention to business pursuits, but at the request of Professor Sylvester, of Johns Hopkins, gave up a profitable employment to take a fellowship for two years, 1882-84, there. In '84 reported Sir Wm. Thompson's lectures for John Hopkins and the Electrical Conference for the United States government. In 1885 was elected instructor of mathematics at Cornell and later assistant professor, which position he held at the time of appointment here. Has been a writer of frequent articles on mathematical subjects.

JUNIOR PROFESSOR OF DRAWING AND LIBRARIAN.

W. H. KIRCHNER, B. S., born at Otter River, Mass., Oct. 24, 1868; received preparatory training in the Templeton High School, after which entered the Worcester Polytechnic Institute, graduating in 1887, having made a specialty of drawing and design. Became instructor of drawing in Rose Polytechnic Institute in 1887. In 1889 was promoted to the position of junior professor in that department, and in 1891 was elected Librarian.

INSTRUCTOR IN PHYSICAL AND ENGINEERING LABORATORIES.

EDWIN PLACE took the degree of B. M. E. at Cornell University in 1883. After two years service with the Sperry Electric Light, Motor and Car Brake Company, of Chicago, returned to the University and spent a year there in graduate studies pertaining to electrical engineering. In July, 1886, entered the employ of Glover, Davis & Co., wiring contractors for the Westinghouse Electic Company, and after three months service was given the position of superintendent of the Westinghouse Illuminating Company of Schenectady, N. Y., which was held for a year. The year following was in charge of construction work for the Western Engineering Company of Lincoln, Neb. January 1, 1888, entered the engineering department of the Edison United Manufacturing Company, of New York City, but at the end of two months accepted the situation of foreman with the Tucker Electrical Construction Company, of New York; remained there till appointed instructor in the Rose Polytechnic Institute, January, 1890.

INSTRUCTOR IN MATHEMATICS AND GERMAN.

ROBERT L. MCCORMICK, B. S., born 1867, graduate of Rose Polytechnic Institute in 1881; received honorable mention in Sophomore and Senior years, took the one hundred dollar prize for best work of Junior year, and won the Heminway gold medal for best work throughout the course. Before entering Rose was a special student of mathematics at Indiana University for one year. Entered Sophomore class of R. P. I. in 1888, and became instructor in the Institute in 1891.

The Fire.

THE first serious misfortune which has befallen the Institute in the loss or destruction of property since its opening, was in the partial burning of the shops on the morning of January 14.

The origin of the fire is not definitely known, but it is supposed to have started in the combustion of greasy waste which had been thrown in the dust room. The night watchman, in going his rounds, discovered a blaze in the "dust flue" which leads from the main building to the dust room, adjoining the boiler room. He immediately turned on the small hose from the hydrant, but this did not seem to have the desired effect. The entire fire department of the city was then called out and soon the flames were under control. The unfortunate bursting of a hose, however, allowed the flames to again gain tremendous headway, and it looked as if the entire structure would be destroyed, but by hard work the flames were confined to the north end of the building.

The loss was limited to the destruction of the lumber stock on the second floor, a large amount of wood work done by the students, and the complete wrecking of the switch board, with its transformers, switches, ammeters, etc. The electrical department suffered the greatest loss and inconvenience. Several of the seniors, having chosen electrical subjects for their theses, were greatly inconvenienced by not being able to use the dynamos, which were thoroughly drenched with the water. A new time schedule was arranged, according to which all of the classes put in full time, doing extra work in the laboratories, drawing, etc.

As the loss was fully covered by insurance, the practical result was the inconvenience and the suspension of shop practice for the students.

ORGANIZATIONS.

Class Colors.

'85—No colors.

'86—Corn.

'87—Heliotrope and Apple Green.

'88—Claret and Nile Green.

'89—Scarlet and Steel Gray.

'90—Straw and Dark Blue.

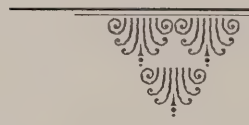
'91—Mahogany Red and Sea Foam Green.

'92—Light Blue, Yellow and Black.

'93—Orange and Dark Blue.

'94—Light Blue and White.

'95—Scarlet and Buff.



The Alumni Association.

OFFICERS.

F. T. HORD . . . . . '88 . . . . . PRESIDENT
O. C. MEWHINNEY . . . . . '91 . . . . . VICE-PRESIDENT
G. M. DAVIS . . . . . '88 . . . . . SECRETARY AND TREASURER

EXECUTIVE COMMITTEE.

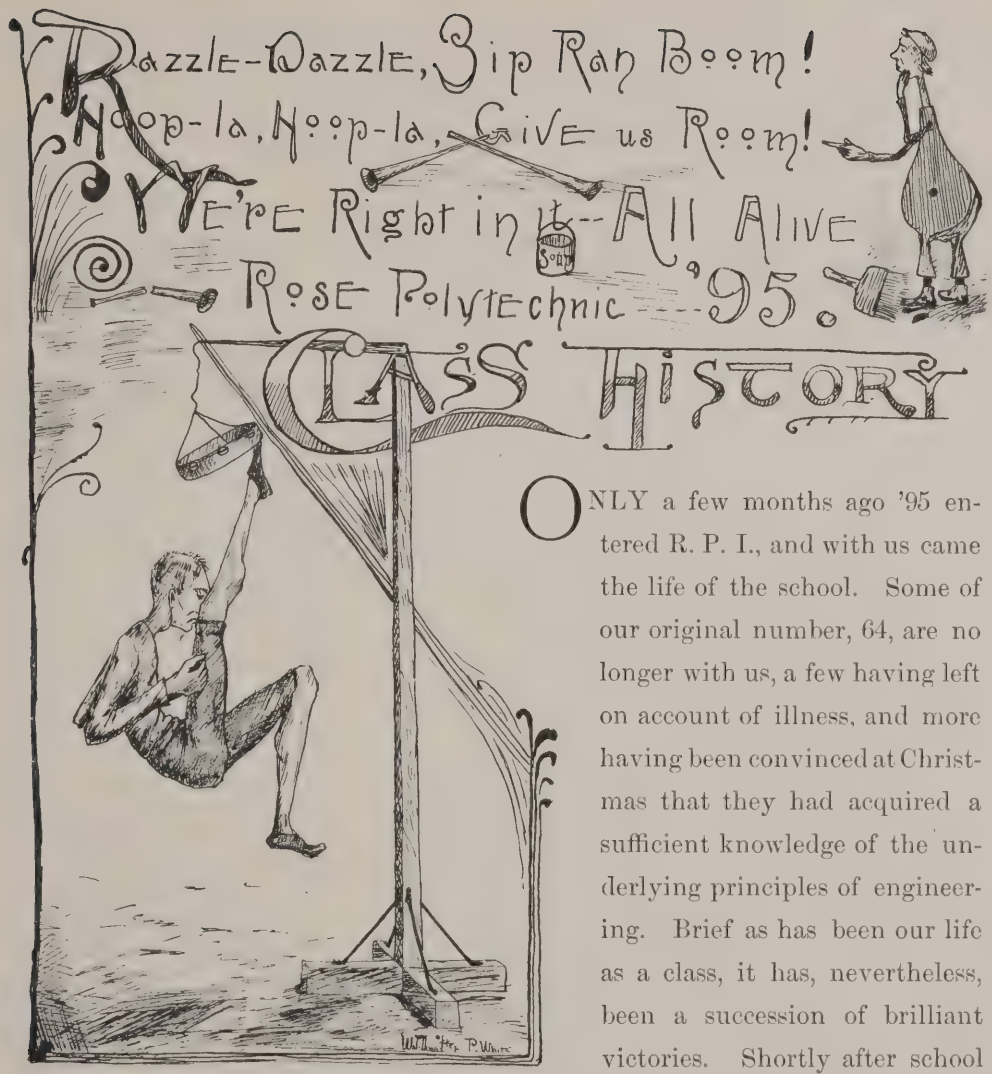
J. B. AIKMAN . . . . . '87
D. M. ROBERTS . . . . . '89
W. R. PAIGE . . . . . '91

AS a permanent organization, the Alumni Association of the Rose Polytechnic Institute first sprang into existence on June 2, 1887, when a dinner was given by the Board of Managers to the members of the graduating class, the Faculty and the Alumni. After the dinner a meeting was called, which has since been termed the 1st annual meeting of the Rose Polytechnic Alumni Association. At this meeting it was resolved to make the Alumni of the R. P. I. a permanent organization, and in order to do this a President, Vice-President and Secretary-Treasurer were chosen, and two committees appointed by the President. One of these committees was directed to draw up a Constitution and By-Laws and submit the same at the next meeting of the Association. The second committee was called the executive committee and to it was delegated power to make all arrangements necessary for annual meetings, banquets, etc. At the second annual meeting of the Alumni,

which was held after a dinner given by the Association to the Board of Managers, Faculty and themselves, in the private parlor of the Terre Haute House, the Constitution prepared by the committee appointed a year before, was adopted, subject to a revising board, and officers were elected for the next year. At the third annual meeting the Constitution was approved, adopted and ordered printed, and a copy sent to each Alumnus. At the fourth and fifth annual meetings nothing of any great importance in the way of business was transacted, but each affair was given up entirely to the enjoyment of the banquets always provided, together with the quizzing of each unfortunate who was put down for a toast.

The first officers of the Association, elected June, 1887, and serving for one year, were: President, Benjamin McKeen, '85; Vice-President, E. C. Elder, '86; Secretary-Treasurer, H. F. Goetz, '87, and executive committee of two, E. C. Elder, '86, and H. W. Foltz, '86. The officers since that time have been:

PRESIDENTS.	VICE-PRESIDENTS.	SECRETARY-TREASURER.
S. S. Early, '85.	J. A. Parkhurst, '86.	C. B. Kidder, '88.
H. St. C. Putnam, '86.	W. R. McKeen, Jr., '89.	H. F. Goetz, '87.
J. B. Aikman, '87.	G. R. Putnam, '90.	H. F. Goetz, '87.
F. T. Hord, 88.	O. C. Mewhinney, '91.	G. M. Davis, '88.



ONLY a few months ago '95 entered R. P. I., and with us came the life of the school. Some of our original number, 64, are no longer with us, a few having left on account of illness, and more having been convinced at Christmas that they had acquired a sufficient knowledge of the underlying principles of engineering. Brief as has been our life as a class, it has, nevertheless, been a succession of brilliant victories. Shortly after school opened, an insulting note from the Sophs, asking if "the Freshmen could play ball?" was posted on the bulletin board. We demonstrated to the whole Institute

on the following Saturday that we could not, *but* we certainly convinced '94 that we possessed sturdy limbs and brawny muscles and could use them to good effect. Emboldened by their success at ball, they thought to "rush" us from the campus. Did we go? No. To-day, in nearly every Freshman's room may be seen a tin horn captured from a Soph on that glorious day. That evening the little store before which stands the image of the noble red man, did a rushing business. Each Sophomore must needs buy a pipe. One of his chief delights now is to exhibit this treasure as his share of the spoils "taken from the Freshmen" on that remarkable day.

'Twas a clear October day, the campus was alive with birds of plumage mostly "Polys." Seated on the downy bleaching boards or grand stand, were the fairest of Terre Haute, bedecked with the colors of their favorites. The large sprinkling of scarlet and buff clearly demonstrated that the new comers had many who were intererested in them. It was the Fall Field Day. The contests were for the purpose of bringing the new athletes to the front; and *they came*, they saw, they conquered. Of the eleven events, '95 men carried off seven. 'Twas on this occasion that the long pent-up feeling of exultation for the afternoon's triumphs broke forth for the first time in the musical roundelay

Razzle, Dazzle. Zip Rah-Boom.
Hoop La, Hoop La, Give us Room.
We're right in it all alive,
Rose Polytechnic, '95,

when our gallant four at the end of three minutes, had pulled the handkerchief six inches over the line from what was, up to that time, the strongest tug of war team in the school. There was rejoicing in the hearts of all the Freshmen when the kicking of the tambourine, by one of us, closed the sports with a second feather in the caps of '95.

On the night of Oct. 30, learning, by the bitter experience of the field day

afternoon, of the muscle of '95, the Sophs came to us and with sweet words of love, asked us to spend the evening with them under Terre Haute smoke and the glare of the electric lights. We went. We learned by that night's association that people are sometimes judged, and unjustly so, by the company they keep. The investigating committee worried us a great deal about some spilled paint, smashed gates, lost freight cars, etc. And it is only lately that we have learned that the Sophs really *did it all.* How modest of them to keep quiet Nov. 1.

Winter sped and when gentle spring was approaching, there came into the heart of each of '95's members a longing for a night of social enjoyment and a refreshing of the inner man. On the 17th of March there gathered around the festal board of The Terre Haute, the class of '95. There was a "vacant chair"; the one who should have occupied it had fallen into bad company, and had permitted some naughty Sophs to lead him astray. The next day will long be remembered here, for the arrest of the four Sophs. But again the large hearts of '95 opened, and had the burly constables release the little boys, after having crushed from their spirits such words as these: "*What will my poor mother say?*"

When '94 heard of our banquet they resolved to hold theirs *first.* A number of them pledged themselves to fast for one week, not only because a keen appetite would tend to increase their enjoyment, but the board bill saved would about pay for a plate. So badly did this fasting tell on these young Tanners that, with one accord, the Freshman class came to the relief of four of the most hungry looking, cadaverous ones, and taking them to a restaurant, treated them to a substantial supper on the night preceding the banquet. 'Tis well we did, for one day more of agony would certainly have *deprived four young men of an education.*

There is much more we would like to say, but modesty forbids, and we know that the actions of the class in the past and in the future, will speak louder than the scratching of the pen of the historian.

Ninety-Five.

A. KENNEDY ASHWORTH . . . . . PRESIDENT
L. CLIFFORD ANDERSON . . . . . VICE-PRESIDENT
HENRY S. BARTON . . . . . SECRETARY
HORACE T. EDDY . . . . . TREASURER

H. Cooper Ayres,
Theodore S. Bailey,
Oliver E. Becker,
Re Bender,
Eugene H. Brandt,
Samuel G. Brown,
Edwin R. Burtis,
John T. Callan,
Frederick W. Childs,
Stewart S. Comfort,
Harry W. Craver,
Charles T. Creal,
Charles R. Crockwell,
Walter W. Crowe,
Henry W. Daniels,
Edward A. Darst,
Harry M. Fuller,
Charles R. Gray,
Albert S. Hebb,
Ernest P. Hoff,
Chauncey H. Holderman,
Frederick G. Hunt,
Clarence L. Jones,
William H. Keller,
Watson J. Klinger,
Edward H. Light,
James R. McTaggart,
Charles A. Manning,
Francis H. Miller,
Roscoe C. Morris,
William O. Mundy,
George W. Phillips,
Hastings M. Pilcher,
G. Peter Reuhl,
Clarence M. Ridgely,
Arthur L. Robinson, Jr.,
A. Oakley Rowe,
Levings Sanford,
Edgar L. Shaneberger,
Hugh C. Smith,
Thos. C. Smith,
William S. Speed,
Lawrence E. Troxler,
Arthur V. Tuller,
Luther H. Vanzandt,
Archie Wade,
Frank Wallace,
Paul H. White,
William Wiggins.

Autobiography of the Class of '94

I, THE Class of '94, entered the arena of activity in the Fall of 1890, being at that time a strong, well-developed youth, anxious to display my powers. Although I was (and am still) a human body, I was composed of an unusual number of members, namely sixty-five. However, by the processes of time, which in this case have been chiefly those of elimination, I have suffered the loss of quite a large percentage of these, and have gained but few in their places. In consequence, I am now a body of only thirty-one members. Paradoxical though it may seem, I confidently believe that neither my original beauty nor strength has been greatly impaired by this loss.

I received my earlier education at high schools, acadamies, &c., at various points in the Western hemisphere too numerous and widely scattered to designate. Hence, I was not altogether unprepared for the duties attendant upon R. P. I. life.

Being broad in my views, I very soon decided to divide my ability among the three courses of instruction at the Institute. But having been particularly impressed with the brilliant future of electricity, and recognizing the possibilities before the electrical engineer, I concluded that my researches should be chiefly in this line. But at the same time recognizing the paramount importance of the work of the transit and chain, without which the electrical engineer would at times be at a loss, it seemed to me necessary to devote at least a small portion of my attention to Civil Engineering. Accordingly, about fifteen per cent. of my members are engaged in this department. And, remembering that the "elements"—even of a science—cannot be studied without the aid of Chemistry, six per cent. of my members devote themselves to this science. Thus represented in these three courses, I shall be equal to any emergency which may arise.

I have already enjoyed several distinctions. I have the honor of being the first class, which, from the beginning of the course, has been under the supervision of our present President, Dr. Eddy. I also have the honor of having been the first, last and only class which was under the instruction of Professor Strunk, in Mathematics. And I was the last class to receive instruction in the wood-shop at the hand of the pioneer instructor, Mr. Sherman.

While things of graver importance have engaged the greater part of my time, I have not been outdone in athletics. My foot ball playing was second to none; and now I do the most of the fielding and some of the pitching in the base ball team. I hold the record for the *high* kick—and in fact for every other kind.

At least twice during my stay at the Institute I have been brought into rather unpleasant prominence (more unpleasant for others than for myself, however) by

what might be mildly denominated *my self esteem*. But upon neither occasion was any one *seriously* inconvenienced by it for any considerable length of time.

Whatever other faults my neighbors may have descried in me, I cannot be accused of riotous living, since I have, in the two years, observed but one feast. But on the contrary *fasts* have not been unusual.

My business affairs during my first year at the Institute were presided over by Mr. Strong as President, and Mr. Holt as Secretary and Treasurer. At the beginning of the present year, Mr. Blinks was made President, and Mr. C. B. McCulloch, Secretary and Treasurer. Mr. McCulloch having since resigned, the officers stand as given at the head of this sketch.

N. B.—If the above sketch seems to the reader somewhat egotistical it must be remembered that it is an autobiography of a *Sophomore* Class.

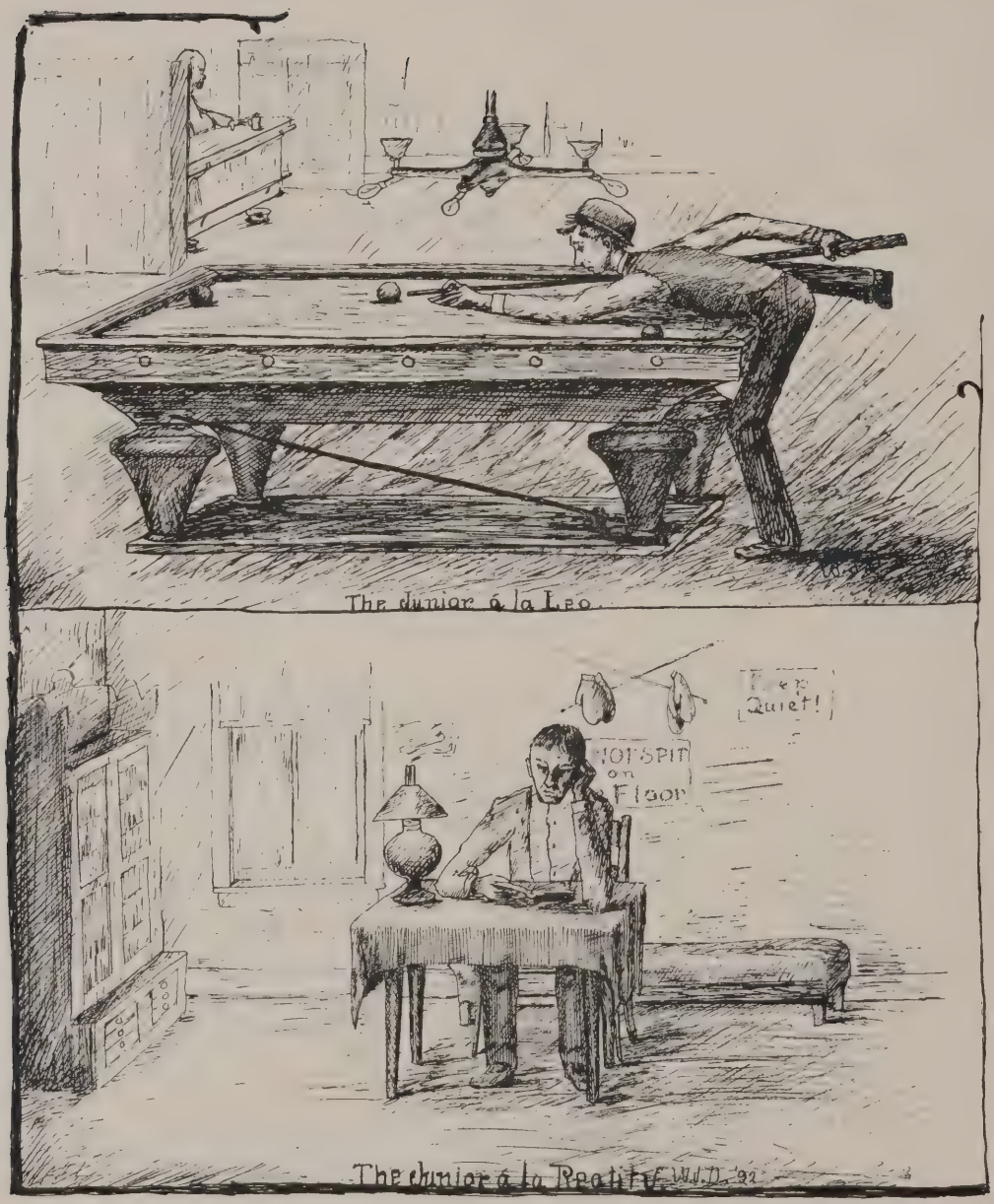
Ninety=Four.

W. M. BLINKS . . . . . President
F. F. HILDRETH . . . . . Vice-President
J. C. C. HOLDING . . . . . Secretary and Historian

W. M. Anderson,
M. C. Andrews,
W. M. Blinks,
E. Brown,
J. W. Dale,
J. F. Denehie,
E. D. Frohman,
O. R. Hedden,
S. L. Henrikson,
F. F. Hildreth,
J. C. C. Holding,
H. J. Holt,
H. G. Kilbourne,
H. D. Kramm,
M. R. Lash,
E. Layman,
A. V. Manchester,
C. B. McCulloch,
D. McCulloch,
G. F. McNaught,
C. E. Mendenhall,
P. Mischler,
A. V. H. Mory,
H. G. Myers,
B. O'Brien,
E. Riedel,
E. F. Robinson,
J. S. Royse,
W. E. Skinner,
J. B. Speed,
G. H. Winters.

A Junior's Soliloquy.

TO crib or not to crib,—that is the question:
Whether this narrow chance of mine can brave
The glaring probabilities of the pending strife
Or take to "horse" against these clouds of fury
And by "riding" pass them? To plug,—to cram,—
No more; and by a "mount" to say we end
The perditious struggle nature ne'er ordained
Us calibrated for?—'tis a temptation
Not to be withstood. Crib it shall be
And tho' all the bards of wisdom
Loos'n fangs against us
Still in ranting rage we'll shout
"Lay on! lay on! 'Tis tough! 'tis tough!
But damned be he, who first cries hold, enough!'


The Junior à la Leo
Quiet!
NOT SPIT
on
FLOOR
The Junior à la Reality W.J.D. '92

Ye Junior Historie.

Dum Vivimus, Vivamus.

Rah-hoo-rah, Yah-hoo-yah!
Hiro-kiro, Zip-boom-ah!
Flies on you, none on me,
Rose Polytechnic, '93.

PERHAPS it may be thought an easy task to relate all the honors which this class has won. Our history, were it to be fully recorded in these pages, would take more space than THE MODULUS would be willing to allow. Suffice it to say, that our record has been that of a spirit unchecked, of courage chivalric, and of a career unequaled. Ninety-three has been distinguished throughout its existence for its heroic unselfishness, good-fellowship and royal independence. Our trials and tribulations have been manfully borne.

Most loyal to the fair sex, we have never neglected our duties for them. Our entire work has been characterized by the cheerfulness and thoroughness with which it is performed, and we rejoice in the fact that our determination to succeed has been recognized and bountifully encouraged by all the members of our honored faculty. We have passed through the woes of Freshman infancy, the care and toil of Sophomoric youth; we have reached the prime of our college life; we have gained the zenith of our college course. The class of '93, from its Freshman year, has been conspicuous in all that makes college life pleasant and successful. The interest of some of our members *may* have extended further, possibly to other educa-

tional institutions in the vicinity, but who and where this narrative saith not. Although buried deep in scientific thought and study, the men of '93 are not without literary tastes and achievements. Music and the arts also find favor in the pleasures of '93, to whom is due the birth of the orchestral and banjo clubs.

For the sake of the feelings of our fellow classes we will not claim to have excelled *all* in *everything*, but we will say, without fear of challenge, that in the introduction of college customs '93 has held the lead.

Our past history affords us occasion for congratulation; our present preëminence causes us additional delight.

Sad the thought that this ideal of college existence is soon to decline toward Senior cares and responsibilities; that we will soon leave behind us the year of all the four, the most happy and the most sweet, the hope of Freshmen, the aspiration of Sophomores, and the regret of seniors.

They were honored in their generation, and were the glory of the times.—Hezekiah v: 2.

Ninety-Three.

AUGUST H. KLOTZ . . . . . PRESIDENT

H. McDERMOTT . . . . . SECRETARY—TREASURER

Clifford E. Albert,
Walter H. Albert,
Burgess Allen,
Maurice E. Becker,
Henry W. Bigelow,
James Dale,
Harry S. Hart,
Walter G. Hesser,
Arthur M. Hood,
Robert E. Huthsteiner,
Svend E. Johannesen,
Edwin S. Johonnott,
August H. Klotz,
Harry McDermott,
James C. McGregor,
Robert H. Moth,
Arthur Rice,
Clarence C. Rose,
Taylor W. Ross,
Robert D. Valentine,
William H. Waite,
Charles G. Wenzel.

HISTORY OF '92

IF some evening you are sitting,
Idle, listless, ennui burdened;—
Read the history then, I pray you,
This history of Ninety-two.

In a city by the Wabash,
By the raging, ramping Wabash,
In the State of Indiana—
Terre Haute the city mentioned—
Dwelt a wise and wealthy warrior:
Rich in milk of human kindness,
Rich, also, in beads of wampum!
And he called his men around him,
Spake unto them—spake in this wise:
"Lo! build ye here three mighty wigwams,
And we will place therein professors,
Wise men all, renowned for learning,
That the young men of the nation
Coming here in search of learning,

May learn wondrous things of nature.
How to chain the barbed lightning,
How to fashion things of metal
And of wood—the mighty monarchs
Of the great primeval forests
Bow their heads to dust before them—
Seeming but as children to them."

So they built the three large wigwams;
Fashioned them of brick and mortar,
And in the year of the Great Spirit
Eighteen hundred eighty-three,
Opened wide the gates to learning.

I.

Five years from the time of opening,
Came a band, for learning eager—
Sixty-five did gain an entrance:
Gathered there to learn the secrets
Of the wise men, the professors.
Nine full moons they labored greatly,
Wrestling with the mystic symbols,
That they found in Mathematics.
Studied Chemistry and Language:
(Though from this history you'd ne'er think it)
Worked in wood, and toiling greatly,
Fashioned picture frames and foot stools,
Daubed themselves with glue and varnish,
Laughing gleefully when some one

Played a joke upon his neighbor,
Hid his saws, or glued his overalls
Tight together at the bottom.
Kept the head of this department
Busy finding out the culprits.
Came at length the glad vacation,
Days of idleness and pleasure;
But before they all departed,
They must write on slips of paper
What they'd learned in school since entering.
When the students held a Field Day,
All the classes sent their athletes,
To compete 'gainst one another.
Such however was the swiftness
And the skill of Ninety-two men
Eleven prizes out of sixteen,
Won they in the friendly battle.
Thus their Freshman year was finished.

II.

Came again in bright September,
In the "moon of falling leaflets,"
Came—alas—but not so many—
Fifty-eight were all that answered,
Fifty-eight to toil and study.
Now they buckled down in earnest;
Wrestled higher Mathematics,
Learned they then to "Deutsche sprechen,"

Read they tales of "What the Moon saw;"
In the Chemical Laboratory
Made they gases, horrid smelling.
In the Shops they learned to fashion
Tools from gleaming glowing metal;
Lifted pots of molten metal,
Pouring it in moulds of sand.
Learned to weld together iron,
Striking till the flying sparks
Looked like twinkling stars at midnight,
When no clouds obstruct the vision.
Yet with all this toil and labor,
Found they time to swipe all classes,
In the good old game of Foot Ball.
But the time went swiftly flying;
Field Day and we still were "in it,"
Eighteen firsts in two and twenty.
Yet examinations awful
Left but forty-one as Juniors,
Forty-one from eight and fifty;
Thus the Sophomore year was ended.

III.

Now again the moon—September,
And continuing in their studies,
Learning now to "Parlez vous,"
Still the waning moons rolled onward,
As the waves roll on the ocean.

Studied they Dynamics, Drawing,
Calculus ne'er knocked them silly;
While with Light and Heat in Physics,
Wrestled as they ne'er had wrestled.
Still in games of skill victorious,
Games of Base Ball and of Foot Ball,
Beat they all the other classes;
And their wild and weird war song
Rose triumphant, rose exultant.
  Then in June again competing,
Came young men from other wigwams
In the State of Indiana;
Alas for them, they were not in it!
Ninety-two came off victorious,
Winning over half the prizes.
  Yet again grim Quizz o'ertook us,
Left but twenty-six to battle.

IV.

Now, thank Heaven, my tale's most ended.
If you've read thus far, and followed
All the windings of my story—
I must thank you for your interest,
Beg of you to keep on reading,
How in Senior year was blended
Work and pleasure closely woven.
  Much we toiled, much we wrestled
With "Rankine's Applied Mechanics;"

Studied out the inner workings
Of some new (?) Dutch "Bogenlampen;"
Figured from observed readings
Modulïï of wood and metal.
Still we played our games of Foot Ball,
Games of Base Ball, games of Tennis.
And on Hallow E'en ascended
Stealthily to topmost story—
Gained the roof, and painted on it
"92," long may it stay there,
Call to mind to coming classes,
Our labors, trials and victories.

Ninety-Two.

W. A. LAYMAN . . . . . President
S. B. TINSLEY . . . . . Secretary
WARREN HUSSEY . . . . . Treasurer
M. L. OGLESBY . . . . . Historian

Allan Smith Bixby,
Thomas Dickinson Boyles,
William J. Davis,
Arthur Maximilian Dietrich,
William John Ehrsam,
William James Fogarty,
Edson Fessenden Folsom,
Sigmund Frank,
Warren Hussey,
Ernst Carl Laux,
Waldo Arnold Layman,
Milton Landis Oglesby,
Claude Ott,
Benjamin Risley Putnam,
Samuel Moorehead Rock,
Luther S. Rose,
Herbert Bell Sperry,
Samuel B. Tinsley,
Bruce Owen Tippy,
Harry Luther Wetherbee,
Walter Morse Wickham,
Albert Wood Wicks,
Robert Lee Wilson,
George Roy Wood,
James Charles Young.

Senior Yell.

Wax—e—co—Wax—co—Wax—co—Wax,
Tari—olitz—olitz—olitz,
Hullabaloo, Hullabaloo,
Rose Polytechnic '92.

Y. M. C. A.

OFFICERS.

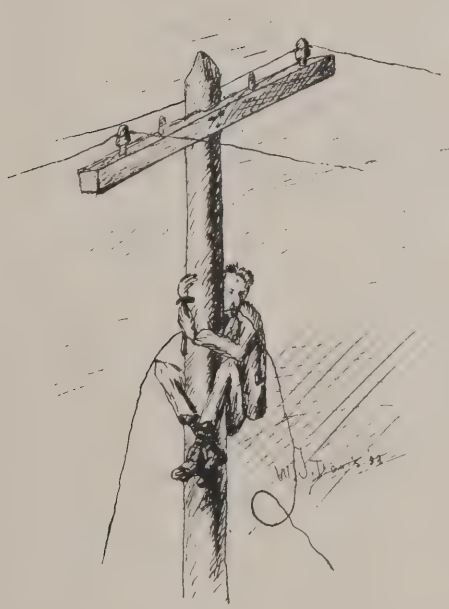
EDWARD RIEDEL	'94	President.
F. W. CHILDS	'95	Vice-President.
CARLETON B. McCULLOCH	'94	Treasurer.
ARTHUR M. HOOD	'93	Corresponding Secretary.
C. M. RIDGELEY	'95	Recording Secretary.

AT the beginning of the present school year a few students, having become thoroughly convinced of the need of Christian work in the Institute, undertook the organization of a Young Men's Christian Association. On October 3d such an organization was effected with eight charter members. Through the untiring efforts of its leaders the membership has grown to about thirty-five, the majority of whom are active. Through the kindness of the directors of the Central Presbyterian church, the lecture room of that church was obtained for place of meeting, the location of the Institute rendering it inadvisable to use the school chapel. The association, while by no means strong, may nevertheless be said to give promise of success in the year to come.

The Telegraph Association.

OFFICERS.

A. RICE . . . . . President.
C. W. WENZEL . . . . . Secretary.
E. S. JOHONNOTT . . . . . Treasurer.
S. M. ROCK)
H. J. HOLT) . . . . . Superintendents.



BACK in the year '89–'90, two Frenchmen, *Messieurs McCabe et McCormick*, founded what is known as the Rose Polytechnic Telegraph Association. The primitive line extended from the corner of Sixth and Canal streets to the corner of Fifth and Linton. Other Polys were taken with the scheme and soon the line was extended through the north end in a manner resembling a spider's web, although not quite so regular. At first these pioneers, the above mentioned and a few others, had no organization, but soon formed an association called the Rose Polytechnic Mutual Telegraph Association; under this name the instruments continued to tick for more than a year. In the early part of '90–'91 the constitution was revised and the name changed to the one under which it now sails. The membership at present numbers 17, including the officers. The equipment consists of many hundred feet of wire, not

quite all of the same cross section, but capable of carrying many amperes; a goodly number of the latest style telegraph instruments and many more cells of battery. Where the batteries come from, and where the supply of vitriol, we do not pretend to say. In the line equipment there is one singular feature of this Association—*it owns no binding posts.* The benefits one receives through membership in this Association are as follows: First, practice in the art of wire pulling, both in getting a desired regulation passed in a meeting, and in fixing a wire to a steep roof; the former strengthens one's jaws and the latter weakens his back; second, practice in pole climbing; this causes a sensation which cannot be described, one must slip when half way up a pole to be able to understand the feelings; third, the telegraphing—*Well!*

The Eating Clubs.

WHEN a freshman arrives in Terre Haute the first thought that occurs to him is in regard to where he shall eat. The Union depot restaurant is the first place that strikes his ear, as his attention is drawn to this place before he has left the train by a big gong being vigorously pounded by a colored gentleman. He eats one or two meals at the depot and then goes into one of the clubs, where he remains until he flunks, starves to death or graduates. A man rarely ever goes to a private boarding house after having been in a club, as it is almost banishment to do so when one becomes accustomed to hearing three dozen men from almost as many different states all talking at once during meal time. There are very few of the boys who have spent four years in Terre Haute and have not at some time or other boarded at one or all the different eating clubs. We refer to the French Club, the Hollis Club and the Mender & Leighty Club. The first mentioned has been in successful running order for several years under different managements, and is at present in a flourishing condition with A. M. Dietrich as purveyor. Burgess Allen organized the Hollis club, on Lafayette avenue, for the convenience of the boys rooming in the north end of town. The Menden & Leighty club—well, it will long be remembered, particularly by these two gentlemen. They have learned that capital and experience are interchangeable in the boarding house business as well as in other forms of speculation. They have the experience.

A club is a great institution. The current gossip that does not find circulation there is of too mild a nature to be listened too, and the class man whose character is not periodically painted both black and white is too insignificant to be recognized on the street.

Club life is real life.

Names of Members.

Leader—S. E. Johannesen, First Cornet.
Honorary Member—Miss Harriett E. Paige.
Pianist—R. E. Johnson.

FIRST VIOLINS.

W. G. Hesser, '93.
E. C. Laux, '92.

SECOND VIOLINS.

*S. H. Fechheimer, '93.
R. E. Huthsteiner, '93.
H. G. Kilbourne, '94.
C. E. Mendenhall, '94.

VIOLA.

A. M. Hood, '93.

FLUTES.

F. G. Hunt, '95.
*H. M. Meadows, '94.
*M. De F. Sample, '94.

CLARIONETS.

A. V Manchester, '94.
C. L. Jones, '95.
*W. S. Todd, '93.

CORNETS.

C. H. Holderman, '95.
*T. S. Perkins, '93.
*T. W. Stone, '94.

TROMBONES.

H. S. Hart, '93.
*G. E. Talley, '92.

BASS.

W. J. Ehrsam, '92.
*J. S. Royse, '94.

DRUMS, Etc.

*Ed. Allen, '92.

*Not now connected with the Institute.

THE ORCHESTRAL CLUB.

C. E. MENDENHALL. H. G. KILBOURNE. R. E. HUTHSTEINER.
H. S. HART. C. H. HOLDERMAN. A. V. MANCHESTER. C. L. JONES. A. M. HOOD. W. J. EHRSAM.
F. G. HUNT. R. E. JOHNSON. S. E. JOHANNESEN. W. G. HESSER. E. C. LAUX.

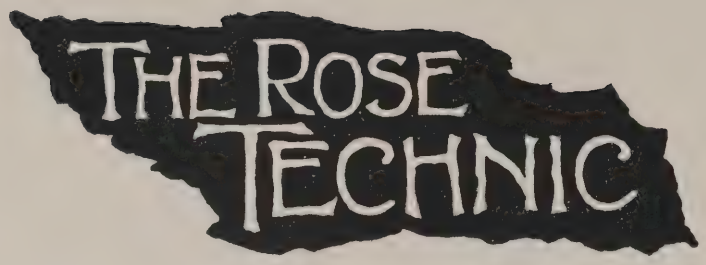
The Orchestral Club.

THE Orchestral Club was first organized in November, 1889. As first conceived it was to be exclusively composed of members of the class of '93, but in January it was decided to make the organization a school affair, and three members of the class of '92 were voted in. With the beginning of 1890, plans for a concert, during the spring term, took definite shape, and the following officers were elected: Leader and President, S. E. Johannesen; Secretary, T. S. Perkins; Treasurer, E. C. Laux; Property-man, A. M. Hood; Pianist, Miss Harriet E. Paige. Miss Paige was at this time made an honorary member of the club. Under the efficient leadership of Mr. Johannesen the club improved rapidly, and, with twelve pieces, gave its first concert on the 23d of May, 1890.

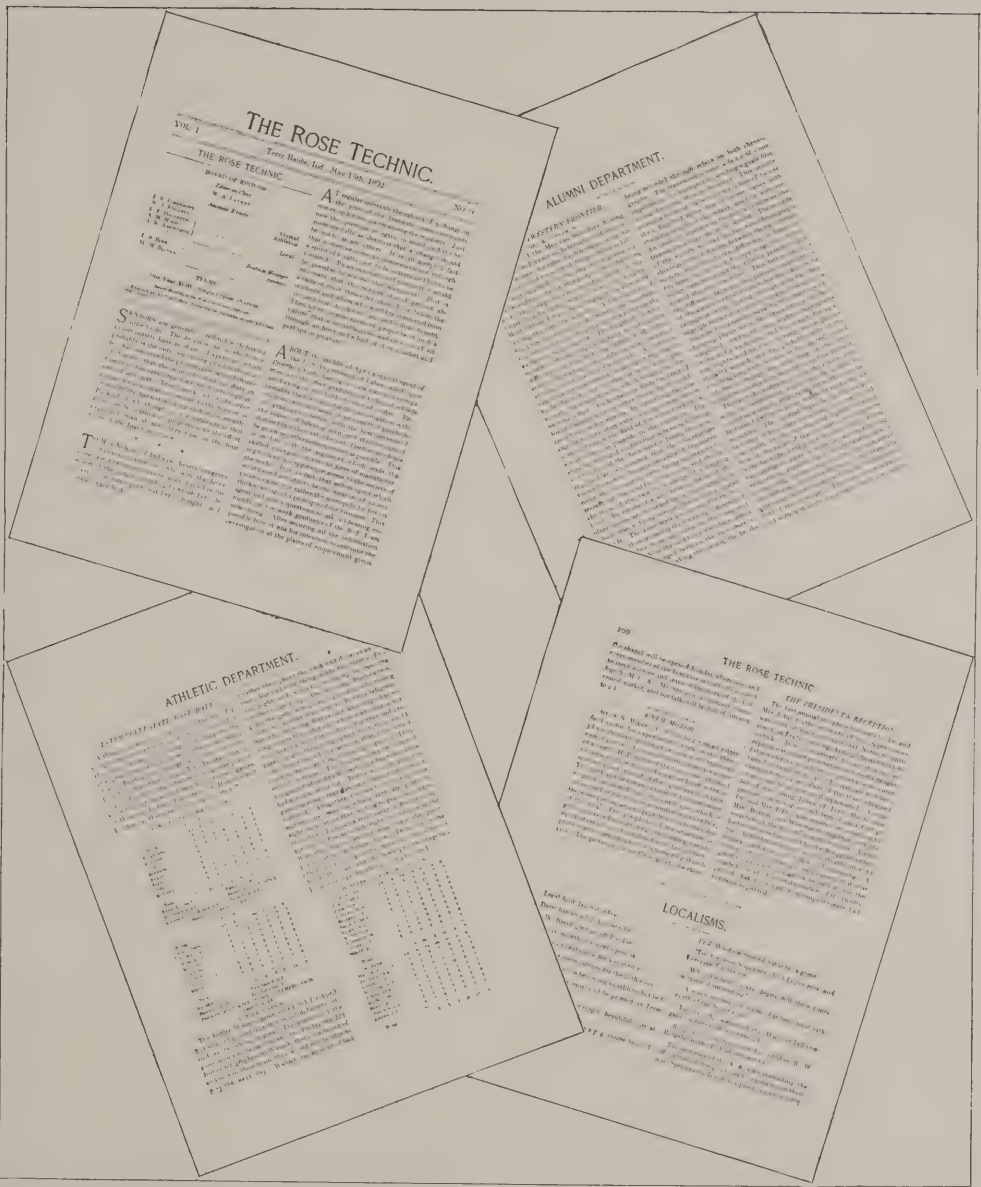
With a loss of three members, the club resumed its work in September, 1890. Five men from the Freshmen ('94) class were voted in, making the membership fifteen. Regular rehearsals were held throughout the winter, and the second annual concert was given, March 26th, 1891.

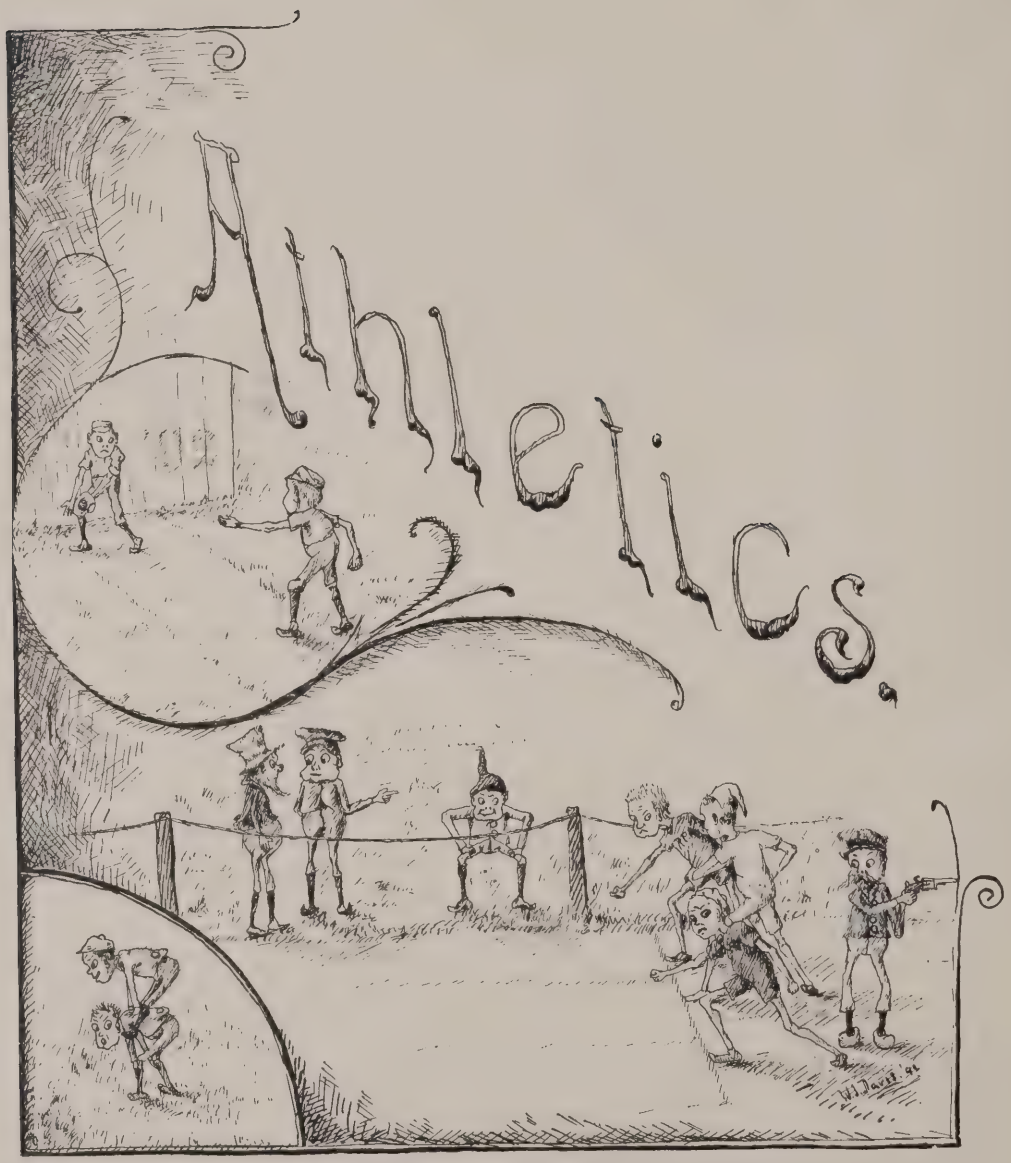
With the beginning of school in September, 1891, work was resumed with a loss of two members. Miss Paige, much to the regret of the club, decided that it would be impossible for her to attend the rehearsals regularly; she, however, retains her membership. Robt. E. Johnson, '93, was elected as pianist. Three members were received from the Freshman ('95) class and one from the class of '93. During the year the club lost, from various causes, three men. The third annual concert, given March 18, 1892, was by far the best one the club has ever given. The membership at present numbers fifteen.

Much credit is due Mr. Johannesen, the success of the club being largely due to his ability and perseverance as a leader.



THE college paper, from a luxury afforded only in few places, has developed into an almost necessary adjunct to all institutions of higher learning. Yet for a number of years Rose was without one, the comparatively small enrollment making it seem a hopeless task to conduct successfully a suitable journal. Upon June 12, 1891, however, appeared the first number of THE ROSE TECHNIC. To the great satisfaction of the ambitious editors the first issue was received with much favor, and immediately such encouragement and support was given that the success of the venture was assured. Associated with the older members of the board in the establishment of the paper were E. F. McCabe, '91, F. W. Hurlbert, '91, and T. S. Perkins, formerly of '93. To them is due a proportionate share of the credit for what THE TECHNIC is. That a paper can be self-sustaining in Rose Polytechnic there is now no question, for from the first THE TECHNIC has received the heartiest support of the students and business men of the city. The first year is completed and now Poly life without the monthly appearing journal would be lacking a pleasant feature. The reception it met with among other college papers has been highly gratifying, one result of which is that THE TECHNIC at present has a place on the Executive committee of the recently organized Indiana Inter-Collegiate Press Association.


THE ROSE TECHNIC.
ALUMNI DEPARTMENT.
ATHLETIC DEPARTMENT.
THE ROSE TECHNIC
LOCALISMS.


Athletics.

The Association.

W. S. FOGARTY . . . . . '92 . . . . PRESIDENT.
JAMES DALE . . . . . '93 . . . . . TREASURER.
C. B. McCULLOCH . . . . . '94 . . . . . SECRETARY.

J. CHAS. YOUNG, R. H. MOTH,
O. R. HEDDEN, G. P. RIEHL,
L. C. ANDERSON.

IN the spring of 1888, only four years ago, the athletic spirit of our students first made itself felt; no doubt it had had a smothered existence from the first, but on account of the uncertainties of the first few years of the Institute life it had not been able to appear. In the year above mentioned, however, a ball nine was organized, a field day was instituted, and as the natural co-ordinate of these an athletic association was organized. True, the organization then made was temporary, without constitution, without funds, without power, but it was the beginning; what followed, that which we now have, was but the natural growth.

Early in the next year a constitution was drawn up, presented to a general assembly of all the students, and adopted by them as the constitution of their Athletic Association. Upon it as a basis, officers and directors were elected, and the Athletic Association took its place as the first school organization.

Inseparably connected with those first efforts of the Athletic Association is the name of Dr. Mendenhall, our former President. It was by his efforts that the first burst of enthusiasm was turned and held in those channels where it would do good to all and not harm. He proposed the Athletic Association and assisted in its organization; and the part he played as chairman of the first board of directors,

the active interest he took in all discussions, will never be forgotten by those who were fortunate enough to be members of that board.

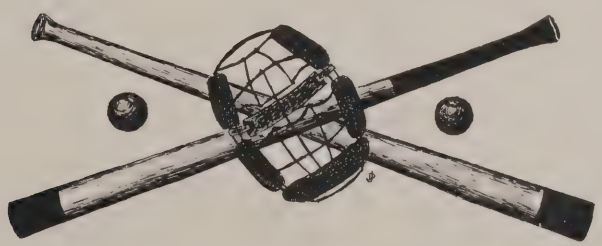
Our Association, unlike the Athletic Associations of most schools, where only those of an athletic turn become members, has always been composed of and supported by almost all of the students. There are not now, and never have been, many here who do not take part in some one or other of the campus games; but even those who care nothing for athletics for themselves are still the active friends and supporters of the Association. Therein lies the secret of our strength; it is due to this united and enthusiastic effort that the R. P. I., with 125 students, has won a base ball pennant and two field-day championships from colleges and universities of from 400 to 1,100 students. Truly, with us, unity is strength, and may the time when our efforts shall be divided along fraternity or factional lines be far removed.

As a description of our base ball nines, foot ball teams and field days could not be given without mentioning those who have figured as leaders in their respective fields, so here it is due to those who gave their time and energy to the association, that their names should be recorded. That of V. K. Hendricks stands first in the list of Presidents, and associated with him on the first board of directors were R. F. Thompson, W. S. Menden and J. R. Leighty, who were leaders in every athletic enterprise during their connection with the Institute. In the year '89–90 Thompson became president of the association; such was his energy and enthusiasm in athletic matters that no undertaking seemed too great for him nor was any sacrifice he could make ever refused. As our delegate to the first convention of the I. I. A. A., as the prime mover and manager of our State field-day excursion to Indianapolis on May 31, '90, and of our winning delegation there on that day he will always hold first place among the leaders of the association.

The year '90–91 is known to most of those now here, and Balsley as the working president and Menden as THE base ball manager are still referred to in our talk of "what was," "what ought to be." Associated with these "hustlers" was also W.

J. Fogarty, who gave evidence of such ability that this year he was, by an almost unanimous vote, elected president. To say that he is a worthy successor of Thompson and Balsley is but to affirm that the association is nearer perfection than ever before and to declare that our inter-collegiate relations are on a better basis than ever before. As an athletic delegate and as a manager his record has been an honorable and a noteworthy one.

The intimate connection of our faculty with the A. A. remains to be spoken of. By a wise provision of the constitution the President of the Institute is chairman of the board of directors, and this alone would insure that the association will always be in harmony with the faculty. But this connection has never been limited to what was prescribed by law; so constantly have the opinions and advice of the different members of the faculty been asked and taken, that it is safe to say that no important action has ever been taken by the board of directors in regard to which some at least of the professors had not been consulted. Thus the board has throughout received credit for a wisdom not entirely its own.



Field Days.

TO Dr. Mendenhall as the author and to the year '88 do we point for the opening of our field day career. In April of that year, the first field day ever held here took place, and though in point of records made it had scarcely the importance of one of our present preliminaries, yet considering its far reaching effects, it was the most important of all. The program consisted of running, standing and running broad jumps, the high jumps, wrestling and a few other events. Unfortunately the records made have been lost, so that we cannot, by comparison, see just what gain has been made since that time.

In June of the same year another field day was held, and on a little larger scale than the first. With this began the custom of holding our field day exercises immediately after the final examinations, and just before the commencement—the custom which makes the wind-up of the year so pleasant for ourselves and our friends. Among the features of the day were the hand-spring hurdle jumping of Rosenfeld, Hendricks' 100 yards dash (time, $11\frac{3}{5}$ seconds) and the tug of war; the latter was the old-fashioned kind, pulled without cleats, by eleven men on a side, in which '91 pulled the rest of the school all over the campus. This was the more remarkable in that it was more than a nine days' wonder, '91 continuing to talk of it until the next June when they met the same unhappy fate at the hands af '92. Besides the tug of war '91 won a majority of first places and held the field day championship for one year.

During the next year field day was so much talked of that the present Seniors, Freshmen then, had their curiosity aroused to the highest pitch; they expected some athletes of their own to make their debut and were prepared to support them. Duff Green, as a 100 yards man, and Dr. Barnett, in the running broad jump, assured

'92 of at least two prizes. The eventful day came but Duff's latest fiance would not permit him to take active part. Some say the Doctor had the gout. But dark horses came to the rescue and one after another first place was scored in favor of '92 until more than enough gave them the championship. Some features of that day have not yet been outdone in brilliancy. For instance, Ed. Allen, stuck in a barrel in the hurdle race, the erratic ma-neuvers of the blindfolded men in the wheelbarrow race, sack race, Ed. Hulman's side action automatic high jump, the almost tragic half-mile run.

The success of this day settled it; the annual field day must henceforth be an established custom just as much as quizzes; no school year would be complete now without it.

Before the time of the third annual, our attention was drawn to the first Inter-collegiate field day. May 31, 1890, found the Poly athlete enthusiastic, yet timid; longing for one or two first places without knowing in what one or two events he had a chance of winning. With such feelings no wonder all worked well together; everyone worked—professors, trainers, contestants, even the ladies lent a hand in encouraging the contestatants. We won, and no wonder; our excursionists came home from Indianapolis tired, but glorious. This was our first contact with the other colleges and we had a right to be proud of the result.

Our own field day following close upon this lost nothing by the comparison, since it consisted mainly of the lighter contests. It was carried on for fun rather than in rivalry, and was witnessed by a large crowd of friends and acquaintances; '92 clung to the championship like a brother.

Ambition knows no bounds. We wanted the next Inter-collegiate field day to take place here, and it took place here. Rain on the very morning of the field day almost ruined it, but still it was succesful beyond expectation, especially to us as champions. Our previous title to the championship of the state was confirmed by a strong majority of firsts.

The school field day took place as usual and again the real and ridiculous of athletics were combined to amuse and vary the monotony. For the third time '92 carried off the honors. It will probably be the last, too, for so many of her athletes have been borne away that those left will find it a sufficient task to carry off the sheepskin with its necessary accompaniments.

Now, in the midst of preparations for the Inter-collegiate meet, it is not out of place to glance at the possibilities of that day. We long for Hanson, Mills, Hulman, Martin, and other sure prize winners that we have lost. We hear discouraging reports of Purdue, Wabash and DePauw, but our star has not yet fallen nor the "Rose and White" deserted. Gibson and Jones are gone, but Bill Nye and Hebb are here; Reuhl is without question a broad jumper, Wallace and Craver with a days' practice could put the shot, and Sandford throw the hammer. Truly, we have much to be thankful for.

P. S.—The third annual Field Day of the Indiana inter-collegiate athletic association was held at Terre Haute, May 27, 1892, under the auspices of the R. P. A. A. Time will not permit of a detailed account of all the events of that eventful day but suffice it to say that everything, including even the weather, combined to make it the most successful one yet held. For the third time R. P. I. came out ahead, winning the championship banner. Most of the contests were close and the records good, as may be seen from the fact that twelve records were broken. Seven colleges competed, all sending large delegations and good feeling was the order of the day. Below will be found a list of contending colleges, showing the number of first places which each has won in each of the three field days thus far held

	1890	1891	1892	Total.
R. P. I.	10	12	9	31
Wabash	7	3	3	13
Purdue	*	2	7	9
DePauw	4	2	0	6
Earlham	*	*	3	3
Butler	0	*	0	0
I. U.	*	*	0	0

* Not competing.

THE PENNANT WINNERS—1891.

O. R. HEDDEN, '94, L. F.
T. S. PERKINS, '93, 1 B.
S. M. ROCK, '92, SUB.
H. J. GEHR, '93, M. F.
W. A. LAYMAN, '92, 2 B.
W. S. MENDEN, '91, CHR. COM.
S. B. TINSLEY, '92, S. S.
S. FRANK, '92, P.
E. T. HULMAN, '92, C.
W. ANDERSON, '94. R. F.
T. D. BOYLES, '92, 3 B.

The Pennant Winners, 1891.

Team Record.

	RUNS.	BASE HITS.	STOLEN BASES.	ERRORS.
R. P. I.	38	32	9	11
Opposing Teams .	21	19	5	20

Individual Records.

	GAMES PLAYED.	A B	R	1 B	S B	P O	A	E	FIELDING AVERAGE	BATTING AVERAGE
Perkins, 1 B. . . .	4	17	4	1	3	51	13	0	1.000	.058
Layman, 2 B. . .	4	16	4	2	2	13	14	3	.900	.125
Tinsley, S. S. . .	4	15	7	5	0	6	12	6	.750	.333
Hulman, C. . . .	4	13	4	5	2	27	8	0	1.000	.384
Hedden, L. F. . .	4	16	9	3	1	5	0	0	1.000	.187
Boyles, L. F. & 3 B.	4	18	4	6	0	1	3	2	.666	.333
Frank, P.	4	15	2	2	1	0	19	0	1.000	.133
Anderson, R. F. .	4	16	1	3	0	1	0	0	1.000	.187
Gehr, C. F.	3	11	1	2	0	2	0	0	1.000	.181
Cook, 3 B.	1	5	2	3	0	2	2	0	1.000	.600

Relative Club Standing.

	PLAYED.	WON.	LOST.	PER CENT.
Rose Polytechnic . . .	4	4	0	1.000
DePauw	5	3	2	.600
Purdue	4	2	2	.500
Indiana University . .	4	2	2	.500
Butler	5	2	3	.400
Wabash	4	1	3	.250

Athletic

Rose Polytechnic Institute.

EVENT.	WINNER.	RECORD.	WHEN MADE.
100 yards dash,	Layman, '92, Hoff, '95	$10\frac{3}{5}$ seconds,	June, 1891 May, 1892
Putting 16-pound shot,	Hulman, '92,	32 feet 4 inches,	June, 1891
Standing broad jump,	Stieg, '92,	9 feet 8 inches,	June, 1891
Running high jump,	Layman, '92,	5 feet 3 inches,	June, 1891
Throwing 16-pound hammer,	Darst, '95,	85 feet $9\frac{1}{4}$ inches,	May, 1892
One mile walk,	Mills, '92,	8 minutes 15 seconds,	May, 1890
120 yards, hurdle,	Stieg, '92,	$16\frac{1}{2}$ seconds,	May, 1890
220 yards dash,	Oglesby, '92,	23 seconds,	June, 1891
High kick,	Hildreth, '94,	8 feet 6 inches,	June, 1891
One-fourth mile run,	Oglesby, '92,	55 seconds,	May, 1892
Running broad jump,	Hanson, '92,	18 feet 9 inches,	May, 1890
One mile bicycle (safety),	Wetherbee, '92,	3 minutes 54 seconds,	June, 1891
Standing high jump,	Layman, '92,	4 feet $8\frac{3}{4}$ inches,	May, 1892
Throwing base ball,	Darst, '95,	330 feet 7 inches,	May, 1892
One mile run,	Butts, '92,	5 minutes $18\frac{4}{5}$ seconds,	June, 1891
Pole vault,	Layman, '92,	7 feet 9 inches,	June, 1891
Quarter mile bicycle (safety),	Klinger, '95,	$41\frac{1}{5}$ seconds	May, 1892
Quarter mile bicycle (ordinary.)			
Two mile bicycle (ordinary.)			
Hop, step and jump.			

Records.

Indiana Inter-Collegiate.

WINNER.	COLLEGE.	RECORD.	WHEN MADE.
Brewer,	Wabash,	10½ seconds,	May, 1890
Stevenson,	Purdue,	33 feet 2 inches,	May, 1892
Ewry,	Purdue,	9 feet 11½ inches,	May, 1892
Layman,	R. P. I.	5 feet 3 inches,	June, 1891
Darst,	R. P. I.	85 feet 9¼ inches,	May, 1892
Erickson,	Wabash.	8 minutes 8⅗ seconds,	June, 1891
Stieg,	R. P. I.	16½ seconds,	May, 1890
Oglesby,	R. P. I.	24⅕ seconds,	May, 1892
Inglis,	Wabash,	8 feet 9 inches,	May, 1892
Oglesby,	R. P. I.	55 seconds,	May, 1892
Newsom,	Earlham,	19 feet,	May, 1892
Marmon,	Earlham,	3 minutes ½ second,	May, 1892
Studebaker, Layman,	Purdue, R. P. I.	4 feet 8¾ inches,	May, 1892
Zaring,	DePauw,	342 feet 2 inches,	June, 1891
Gemmer,	Purdue,	5 minutes 1⅘ seconds,	May, 1892
Blair,	Wabash,	8 feet 9¾ inches,	May, 1892
Klinger,	R. P. I.	41⅕ seconds,	May, 1892
Jernegan,	Wabash,	45⅖ seconds,	June, 1891
Wilhite,	Wabash,	7 minutes 2½ seconds.	May, 1890
Newsom,	Earlham.	40 feet 9 inches,	May, 1892

Base Ball.

"SLIDE! SLIDE!"

"Ole Perk's" was the voice, and in response the ball team of 1891 emerged from the dust cloud over home plate with a record unparalleled. Percentage 1000. Teams defeated—Indiana University, the princes of genial hosts; DePauw University, the "Apaches" of 1891 ball warfare; Purdue University, the rivals of the season; Butler University, our easiest foe. How about Wabash? Providence sent rain that her percentage might not fall to 200.

Rose's pride could not contain itself. The members of the team were heroes; "Managers" Menden, Tinsley, and Captain Perkins generals from the old wars; "Sig" Frank the greatest pitcher this side of eternity. Never was such *beautiful* work displayed. All because the school to a man supported the team. Down through the annals will this season's record go, a scarlet page in the history of Indiana college athletics.

Glance further in proud retrospection. What of the previous year? Another succession of victories, to be sure not quite continuous, but nevertheless ending with Rose balanced against DePauw for first place. This was the first year of the Inter-Collegiate Ball League. The result gave ample cause for congratulation. Our players were Austermiller c, Frank p, Perkins 1b, Layman 2b, Tinsley s, Boyles 3b, Failing rf, Smith mf, and Menden lf. This was the year also of such immortal expressions as:

"Well! Well! Well! I never seen such a score."—I. U. coacher.

"W. C. T. U. Dinner and Death."—Paraphrase of "Butler won."

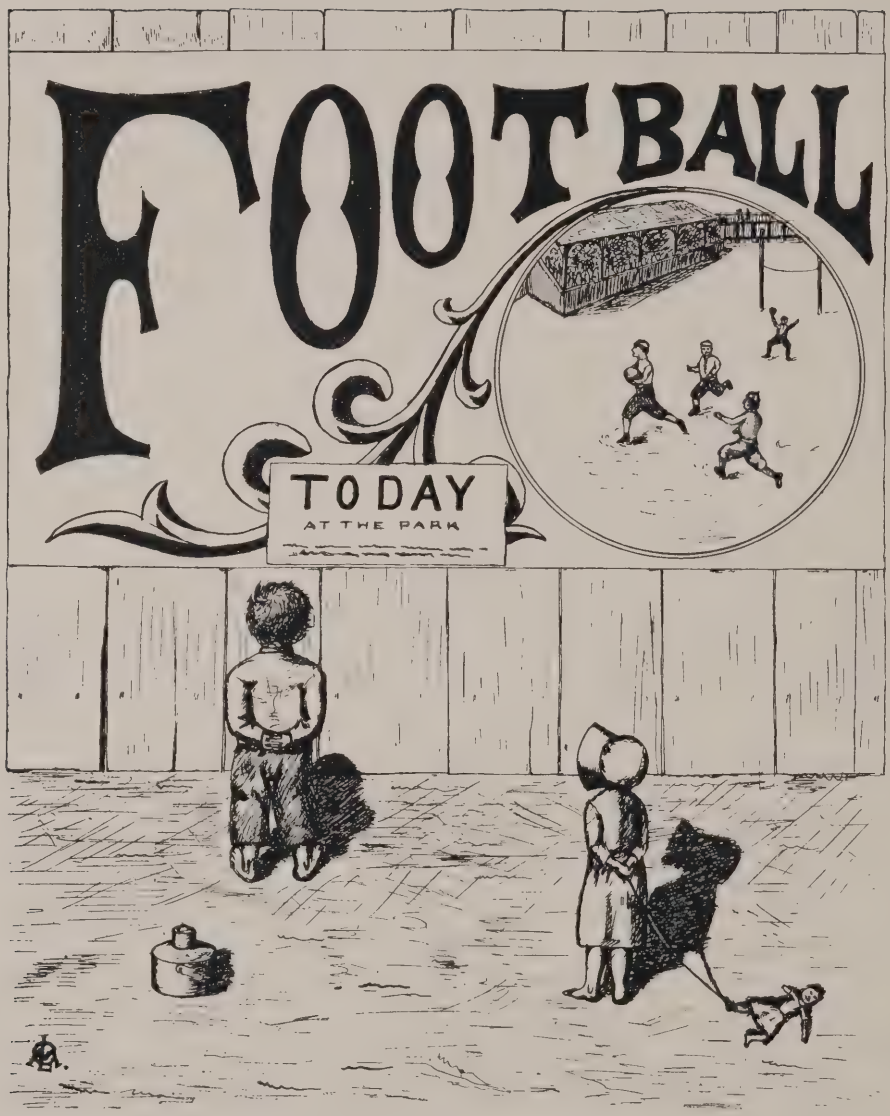
"Mr. Johnson doesn't feel well this evening and desires to be excused."—Daily of I. U.

Looking backward two more cycles, a survey of the work of the first school team discloses Captain Kelley at the head of the Poly "dudes" discoloring the optics of every ball team in Tarry Hut. Every "common round town" was soaked in the gore of opposing rivals (?). The Lotus Club ate their crow; the Rockets sailed up in brilliant colors, but fell to earth we know not where; the Eastern Stars sank into darkness impenetrable; the Crescents sought in three games a first, second and third "quarter," but were shown no quarter at all. Finally all these aggregations combined, sifted out their chaff, and in one mighty effort tipped the beam. 'Twas 7 to 5, close, but against us. It was a defeat to be proud of, nevertheless.

The next year Manager Wiley bought a silk hat and took the team for a cruise. The boat couldn't sail in the gale. Black jersey uniforms, notwithstanding the tireless efforts of Mr. Wiley, proved "joners." Three games were played. Three graves were dug. We now sing a song of which the refrain is "Black Discarded Forever."

This—year—the—team—hasn't—played—with—its—accustomed—vigor. We are—not—in—it. Please—ask—no—questions.

Class base ball has at times been warmly contested. But for four years the result has been invariable. Ninety-two has had no rivals. Annually all the classes which have shown ambition to tackle them, have been accommodated with a defeat. Occasionally, but not generally, good games have been played. Both '94 and '95 have shown ability, '94 undoubtedly being entitled to second place, with '95 and '93 following as third and fourth. So long as the Institute team calls for support, class games will suffer. So they should. The motto should be, and, thanks be to all, is "The school team first, last and all the time."


FOOTBALL
TODAY
AT THE PARK

Foot Ball.

THE festive foot ball is pushing itself forward with great rapidity as the favorite toy of athletically inclined "Polys." It is true we have never played before thousands of spectators, have never heralded our games all over the country as Yale, Princeton and other Eastern colleges do each year, have never given any magnificent foot ball tactics to the athletic world, still we have *played ball* quietly but surely and next year we expect and are sure of recognition in this line of athletics.

The games of "Rose" have always been confined to her own grounds and teams. The ambitious rushers, half backs, quarters and full-backs feel that the outside college world of athletics should no longer be left in ignorance of our prowess, agility, force and intellect in front of and behind the goal, and in the future we hope to be one of the brightest stars in the Indiana Inter-collegiate foot ball constellation.

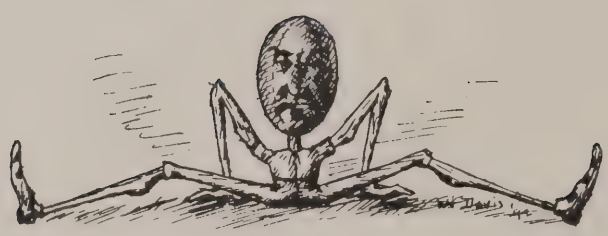
In review of foot ball interests, the team of '95 is to be highly commended for the excellent and determined work they have done in this their first year. Although they won no game in the last series of class games they did make the only score against the winning team.

The team of '94 is one of which "Rose" can be proud. It has some foot ball giants who, with practice, will make players.

The team of '93 is older than that of '94 both in experience and knowledge of tactics. It has run well in all of its hard fought battles and with the team of '94 will furnish the school next year with the majority of players for the Inter-collegiate (?) team.

The present Senior class has a team with a clear record of which it is proud. It

has never known defeat and now at the end of the four years it can hang up its armor, raise the flag of victory and rejoice in the knowledge that at least four years must pass away before another class team may do likewise. Coming on the field in its infancy it worsted the well disciplined team of '91 and followed it up with victory after victory. It regrets only its inability to have a part in the many future triumphs which "Rose" is sure to enjoy on the foot ball field of battle.



Tennis.

TENNIS, like other competitive sports in which there are no records or standards of comparison excepting actual contest, is dependent, both in quantity and quality on the facilities offered for such contest. The lack of these facilities has been a great drawback to tennis in the Institute, but this disadvantage has been overcome at last, and we may expect, in a very short time, the accession of tennis to front rank among field sports.

The first tennis courts in the Institute were directly east and west of the main building. The chief disadvantages of these courts were their nearness to the building, especially to the lower drawing room, and the lack of back stops. Prof. Ames was found to have a decided objection to the "mad bursts of pale blue profanity" which occasionally drifted in through his windows, and which were probably caused by the entire absence of back stops as above mentioned.

It became a necessity to provide more and better courts for the devotees of the "gentleman's game," and as the Athletic Association was at that time financially embarrassed, a Tennis Club was formed with thirty charter members at one dollar each, and about twenty others at two dollars. With the money thus obtained, three back nets were erected between the Shop and Chemical Laboratory. The funds gave out early in the season, however, and it was through the kindness of Prof. C. S. Brown, who advanced the necessary cash, that the back nets were finally completed about May 1st, 1890.

The entrance fee and liability to assessments were found to act as a considerable obstruction to the eager throng who desired to play expert tennis, and objections to the exclusive franchise granted the Tennis Club, became constantly more numerous and urgent. In view of these objections, it was deemed best by the faculty

that the Tennis Club and the Athletic Association should be merged into one, and a committee consisting of Professors Brown and Hathaway, was appointed to bring about such result with the least possible injustice to either side. The Athletic Association appointed Messrs. Young and McCulloch, the Tennis Club, Messrs. Boyles and Wood, as committees of arbitration, and as a result of their conference the Athletic Association bought out the Tennis Club franchise and apparatus for the sum of $62.00, which was paid March 22nd, 1892. Three of the four courts thus obtained were "skinned" at once; that is, the sod was removed and ground leveled up, and as soon as the weather permits the courts will no doubt be filled during all the students' spare time.

The Institute has won the "doubles" on State field day each time since we entered the State Association in 1890, Messrs. Jones and Gibson being the winning team in '90 and '91; and Wales and Mendenhall this year. The singles were won this year by Boyles '92, in brilliant games. At Fall field day, last October, Wood and Tippy of '92, captured the doubles, and Sample, of '93, the singles. Tennis already holds first rank at the Institute in the number of players, and with the improved facilities now offered, we should make our presence felt at State field days in the future, as in the past.

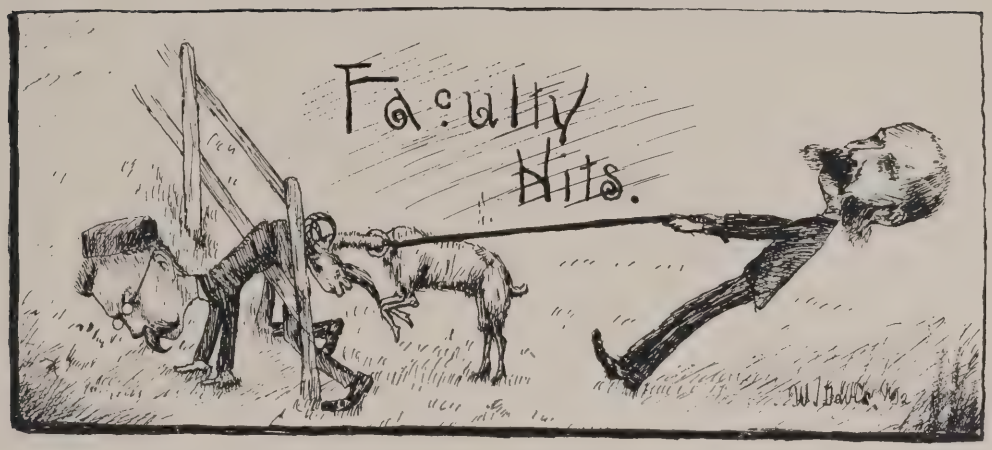
The Wheelmen.

THE "Rose Polytechnic Wheelmen" organized April 17, 1891. The objects in view were to promote good-fellowship among the Institute wheelmen and to advance the interests of cycling. The officers chosen at the time of formation were, A. P. Peck, '92, President-Captain; H. B. Jones, 91, Lieutenant; A. L. Hupe, '91, Secretary—Treasurer. The original membership was about 15, the majority riding safeties. There were a few ordinaries and one Eagle. The first official run was to Clinton, April 26, and was made by eleven members. The party started from "The Terre Haute" at 8:30 a. m., arrived at Clinton in time for dinner, left at 2:40 p. m. and reached home at 5:00. This, and several later runs, were made memorable by the mishaps of our "Eagle" rider, whose playful habit of taking "siders"—the nearest thing to a "header" possible with such a machine—and the innocent remarks at his expense on such occasions, kept his companions continually in a state of merriment. A run made to Marshall, Ill., May 10th, was considered the best and most enjoyable of all. The last run of the season was made to Macksville one evening after a business meeting. The club went a mile beyond the village to witness the approach of an electric head-light. Then crossed the Vandalia railroad, and incidentally attended a strawberry festival on the way back.

Owing to graduations and casualties consequent to strict final examinations, the R. P. W. found itself without officers at the beginning of the present school year.

However, the club was reorganized October 1st with S. S. Wales, '91, President-Captain; M. H. Bentley, '94, Lieutenant; H. F. Dyson, Secretary-Treasurer, and a total membership of ten. At the beginning of the Spring term of 1892 Messrs. H. L. Wetherbee and R. D. Valentine were elected to fill the offices of Lieutenant and Secretary-Treasurer, left vacant by the resignation of Messrs. Bentley and Dyson.

The present membership of the club is, S. S. Wales, '91; H. L. Wetherbee, '92; R. D. Valentine, '93; A. W. Wick, '92; B. R. Putnam, '92; C. C. Rose, '93; R. H. Moth, '93; B. Allen, '93; W. M. Blinks, '94; E. W. Frohman, '94; E. L. Shaneberger, '95. The club is in fairly good condition, interest only lagging by actual necessity attendant on the pressing nature of college work at this season.



"Saw a scrap to-day."—McC.

"Ye gods! I am not late."—C. S. B.

W. L. A. has given up hundred yard dashes. The judges couldn't tell when he crossed the line.

It is said that one professor has turned his attention to the cultivation of an athletic spirit among the ladies. He holds the hat.

"Now, you see, it occurs in this manner. The north end of the needle points north, and the south end south."—Prof. P.

"He draweth out the thread of his verbosity finer than the staple of his argument."—C. L. M.

Puss in Boots is now breaking in the Freshmen by telling blood-thrilling tales.

Prof. Gray has a keen appreciation of the proper thing. He has been known to excuse himself for having been in the way when a student shut the door in his face.

There are various ways of working a faculty pipe line. The formula reads:

With Prof. Noyes—"Say nothing but scratch like fun during lectures."

With Prof. Wickersham—"Always be ready to change your mind."

With Prof. Howe—"Kiss Homer."

With Prof. Kirchner—"Always know the score."

With Prof. Brown—"Wear dirty overalls."

A Midnight Summer's Dream.

Scene: Coates College, Chinese Tea.

Time: 9:30 P. M.

Pres. D—n—(standing on chair)—"I wish to say that the last car leaves in five minutes."

Infatuated Poly—(on the side)—"I must go."

She: "Don't let *him* drive you away."

10:45—Pres. D—n: "I observe a mathematical weakness on the part of a number of Polytechnic gentlemen."

Mrs. D—n: "You probably mean feminine weakness."

Pres. D—n: "Quite right."

10:50—Pres. D—n: "Gentlemen, you fail to realize the flight of time. I said several days ago that the last car would leave in five minutes."

B–l–k–s, B–x–b–y, R–dl–y, M–n–ng, A–der–on, Wh–te, "K–d H–d, (making for door.) "Good nig—." "Thousand pard—." "No idea so la—." "Bless her heart."

Down the walk, on a dead run, they tore, but sweetly came the echo:

"Rah, hoorah, Hiro-kee!
The Poly boy is the boy for me.
Kick-a-ball-ball, kick-a-bah-bah,
Coates College, Coates College.
Rah! Rah! Rah!"

CLASS OF '92.

The Modulus Committees.

EXECUTIVE:

W. A. Layman,
W. J. Davis,
W. J. Fogarty.

LITERARY CONTENTS:

W. A. Layman,
B. O. Tippy,
S. B. Tinsley,
G. R. Wood,
B. R. Putnam.

ILLUSTRATION:

W. J. Davis,
M. L. Oglesby,
Claude Ott.

WAYS AND MEANS:

W. J. Fogarty,
A. M. Deitrich,
J. C. Young.

H. B. Spencer Jr.
Rob Bailey
Louden S. Ross
T. D. Boyles
W. A. Laymon
Warren Hussey
W. J. Thomson
B. R. Putnam
R. L. Wilson
J. B. Linsley
Eugene Frank
John Young
Claude Ott
Ernest Edwards
Edgar F. Folsom
Millen L. Oglesby
The Albertype Co N.Y.

Through the Spectroscope.

"With malice toward none, with charity for all."

A. S. BIXBY.

"This aspect of mine the best beloved virgins of our clime have loved."

Allan S., known to fame and the sporting world as "Bix," is a youth of quiet and reserved nature, finding more pleasure in a big rocker and something by the Duchess, than in the busy haunts of men. "Bix" was born in Philadelphia, Pa., September 6, 1870, but his parents wishing him to be brought up among rural surroundings, far from the temptations attendant with city life, removed to Grand View, Ill., where he now resides. This accounts for his childlike innocence and ignorance of the ways of the world. Before entering R. P. I., "Bix" attended school in Philadelphia, Pa., and in Asssumption, Ill.

T. D. BOYLES.

"His very foot has music in it."

"Timmy" was rescued from eternal oblivion three years ago and has since served as a valuable addition to '92, having distinguished himself especially in tennis, foot ball and base ball. He came originally from the Chicago Manual Training School and will have the honor of being the first member of that school to be graduated from R. P. I., although a variety of others have tried. He believes the Chicago Board of Trade is a branch of the Protestant church. Needless to say he was born in Chicago. Date, April 13, 1870.

W. J. DAVIS.

"Yond Cassius has a lean and hungry look;
He thinks too much; such men are dangerous."

"Scrapper" Davis is, as his name implies, of an independent and "scrapperistic" turn of mind. As everybody knows, he hails from Kentucky, being born in Louisville, May, 13, 1868. He was graduated from the Louisville High School in 1888, receiving the degree of A. B., and entered R. P. I in the fall of that year. It is chiefly as a tug of war "anchor," a ward politician and a good student that "Greencastle Billy" has achieved his present great renown. What he and "Ducky" don't know about alternating currents and mechanics he knows by himself.

A. M. DIETRICH.

"None but himself can be his parallel."

Arthur M. is the only thoroughbred "sprechen sie deutsch"-man in the class. "Dutch," as he is familiary known, was born near Ottawa, Kan., February 17, 1871. He attended the public schools from 1876 to June, 1888, and entered the Institute in the fall of that year. A marked change has come over Billy in the past year. Whereas once he was sober even to austerity now he is one of most jovial of men. It would be doing him an injustice not to mention his popularity among the High School girls. We have been unable to ascertain whether the above mentioned change is due to the above mentioned girls or not. He has been a hard and successful student, a "climber" in several senses of the word. He carries the Heminway bronze medal at the end of his watch chain.

W. J. EHRSAM.

"I have passed a miserable night, so full of ugly sights, of ghostly dreams, so full of dismal terror was the time."

"Sleepy eyed Bill" is a man of dignified bearing and orderly deportment, which adds largely to his influence as an advocate of prohibition.

He was born June 10, 1871, at Enterprise, Kansas. He was a student at the Kansas State Agricultural and Mechanical College, from 1886 to 1888 and entered R. P. I. in the fall of 1888.

W. J. FOGARTY.

"I do object. I do object."

"Bill" was born November 19, 1868, at Dayton, Ohio, and was graduated from the High School of that place in '87. After a year of practical work he came to the Poly. As president of the Athletic Association, member of THE TECHNIC board, and a silent partner in "that" tennis club, his Senior year has been a very busy one. He has his opinions, consequently yours are not necessary. He has missed one Duenweg reception in three years. His chief hallucination is that sewer gas emanates from clocks.

E. .F FOLSOM.

"By sports like these are all his cares beguiled,
The sports of children satisfy the child."

Folsom was introduced to an eagerly expectant public on the eighth of August, 1870. All nature held its peace and has been holding it ever since, through astonishment or inability to "get a word in edgewise." Ed suffered under the sarcasm and biting irony of pedants until his fourth summer, but never got a diploma. His life, he tells us, was uneventful. His chief sorrow is that he has never "saved a cat from drowning." If Mr. Folsom will call at our lodgings his longing will be gratified if it takes our last feline. He has never served on the police force, but residents of Mulberry street inform us that Ed has served his apprenticeship as night watchman creditably.

Ed's distinguishing characteristic is his cheerfulness. His playfulness and 'wanton wiles' have often provoked the ire of his classmates during an extra tough quiz, and has led the under-classmen to adopt the erroneous idea that Ed is a prep who started in at the wrong end by mistake.

SIGMUND FRANK.

"Full well they laughed with counterfeited glee,
At all his jokes, for many a joke had he."

Sig. also was rescued from eternal oblivion two years ago. He was born on November 28, 1869, in Nordstetten, Wurtemburg, Germany, and is the only man in the class of foreign birth. At Sig's advice his family moved to Terre Haute, in 1871, and he has since resided here.

He held down the box in the center of the diamond very creditably until this year, when he refused to play. The success (?) of the team is due, no doubt, in a large measure, to his absence. Sig. is a jolly, good fellow and very popular among the boys.

WARREN HUSSEY.

"My only books were women's looks,
And folly 's all they taught me."

Hussey has held the important position of class treasurer for four years, and expects to leave for Canada the day before Commencement. Born in Terre Haute, he spent seven years in the public schools and three years in the High School, entering R. P. I. in the fall of 1888. "Huz" is an all-round good fellow, passionately devoted to hard labor and "cigeroots," admired by all the fair sex, and the especial protege of "Doc" Mees and Prof. Brown. He attends all matinees for children on Saturday afternoons.

E. C. LAUX.

"The fool hath planted in his memory an army of good words."

On November 24, 1871, at Waukegan, near Chicago, Mr. Laux first entered the lists. In 1883 he moved to Los Angeles, California, from which place he came to Terre Haute in 1888. He has resided here since, and incidentally attended the R. P. I. He is well known to Terre Haute audiences and to his landlady as a player of the violin, and has been a prominent member of the R. P. Orchestral Club. His eloquence in arguing doubtful points with various members of the faculty has often been remarked upon.

W. A. LAYMAN.

"Who mixed reason with pleasure, and wisdom with mirth."

Layman was born at Smithton, Mo., October 27, 1869, and since then has lived and attended school at Gillespie and Hillsboro, Ill., and Terre Haute, Ind., being graduated from the High school at the latter place in '87. After a year's editorial work on the Terre Haute Express, he entered R. P. I. but continued to do special work for the Express and later on the Saturday Evening Mail. He has ably filled the office of class president since entering the school and under his guidance the Rose Technic has been founded and carried through its first year. On the track and *diamond*, in society, in literary pursuits and general institute work, and as leader of prayer meetings and other insurrections he has shown a breadth of development possessed by but few.

M. L. OGLESBY.

"Bid me discourse, I will enchant thine ear."

Milton L., *alias* "Mormon" "Deacon," "Ogle," "Bill," etc., was born Sept. 2, 1871, at Indianapolis, Ind. He is of a roving disposition and has in his time lived in several places. He became discontented with the Capital after a five-years' sojourn there and persuaded his parents to move to St. Louis; the spirit of dissatisfaction followed him there, however, and in turn he tried living in Louisville, Elizabethtown and Kansas City, and finally settled down in contentment among the Mormons in Salt Lake City. He received a common school education and one year at an academy before entering R. P. I. It is frequently remarked that all western people are fast, a statement which Deacon is ready at any time to verify—($\frac{1}{4}$ mile preferred). An examination of the record of his absences from recitations shows that a decline has evidently set in. His love for the West is the only other explanation.

CLAUDE OTT.

"Full many a flower is born to blush unseen
And waste its sweetness on the desert air."

Claude, the rising young orator of the class of '92, frequently delights and electrifies his classmates by his masterly outbursts of eloquence. He is of a quiet and unassuming disposition, prefering a few hours of quiet leisure with a German lexicon to an evening spent in society. Claude was born at Rockville, Ind., March 5, 1870. He left the high school at the end of his Junior year and entered R. P. I. He is one of the most practical men in the class as is shown by his masterly construction of a electrical generator in his Sophomore year.

B. R. PUTNAM.

"My life is one demd horrid grind."

"Put," as he is usually called, is a quiet, unassuming fellow and a hard worker. He came to us in the Sophomore year, from Davenport, Iowa, where he was born on December 29, 1871. Graduated from the High School at that place in 1889; entering Rose in the fall of that year. He takes active part in all debates and is a rank protectionist, although his arguments favor free trade. He is right in it with the girls—and Faculty too—and is never happier than when shoving his brogans over the floor in time to the terpsichorean melodies. Holds the record for obtaining catalogues of other institutions.

S. M. ROCK.

"One ear it heard, and at the other out it went."

"Blondie," '92's pretty man, who missed his calling in not going on the stage or making a profession of "soldiering," was born at Latrobe, Pa., March 25, 1869. He attended school at Greensburg and Latrobe, Pa., and after working four years entered with us in '88. As an ambitious base ballist, one of the "gang," and an opera escort, he has no rivals. He is looking for a father-in-law, with whom to go into business.

L. S. ROSE.

"For he will never follow anything that other men begin."

Better known to his intimate friends as "Chauncey"—because he so much resembles our great benefactor—was born in Meadville, Pa., in Oct. 1868. At an early age he entered the telegraph office as a messenger boy. By hard work and strict attention to business—of not delivering messages faster than a walk—he obtained a position as operator. He is on the editorial board of the *Technic*, and can write "Biz. Mgr." after his name in good style. He will no doubt be present at the editor's "divy." He is one of the two civils, and bids fair to make his mark in the world. He would rather seat himself in Dr. M.'s easy chair and look over catalogues than measure the resistance of a shunt dynamo.

H. B. SPERRY.

"Be to his virtues very kind;
Be to his faults a little blind."

Herbert B. Sperry dates his existence from December 10, 1866. Although he comes from among Adirondacs, Sperry finds *the West* very attractive and contemplates making this locality his permanent abode.

There is a mistaken idea abroad in regard to Sperry's meddlesomeness, which we wish to correct. Notwithstanding what you may hear to the contrary, don't you believe Sperry lays his hand on any machine or instrument, impelled simply by curiosity. As a good man in the shops he has few equals in the class.

S. B. TINSLEY.

"I have a man's mind but a woman's might:"

"Colonel" Tinsley was born in Shelby county, Kentucky, February 28, 1867, and moved to Louisville in 1884. After graduating from the Louisville High School in 1888, he had the misfortune to tackle the Poly. Since then he has been noted as a billiard player, a Y. M. C. A. young man and a base ball manager, but it is in the latter capacity that he has achieved his greatest fame. His general importance is inversely proportional to his size, as he is the shortest man in the class. He has held the lucrative position of class secretary for four years. As a short stop he is a great (?) success.

B. O. TIPPY.

"He thought some of entering the ministry."

Born in St. Joe Co., Indiana, March 7th, 1868, B. O. spent his early life, according to the custom of that locality, in the district school. Since then his scholastic career has been somewhat varied, the New Carlisle High School, DePauw University, Bryant & Stratton's Business College in Chicago and R. P. I. having successively been honored by his attendance. He joined us in '89 and has since been known to the faculty as a hard working careful student, but with the Normalites he has a different "rep." But inconsistencies like these are sometimes common in college life. His attempts in the burnside line have been heart-rending.

H. L. WETHERBEE.

"His corn and cattle were his only care,
And his supreme delight a country fair."

H. L., better known among the Normal girls as "Harry," was, as you will guess, born and raised on a farm, near Marshalltown, Iowa. It happened February 22, 1869. *He* has never told a lie, either. He attended the public schools until 14 years old, the Albion Seminary three years, and then came here. Harry's best friend, outside the Normalites, is his "safety." He rides for physical development. "Seems like as if" is his favorite expression. Harry will make a great man for the head of a family.

W. M. WICKHAM.

"There's matter in these sighs;
These profound heaves you must translate,
'Tis fit we understand them."

Walter Morse, also called "Wick," is a man of whom any class might be proud. His praiseworthy efforts in the mustache line as well as his noble sacrifice of self in teaching others how to use the buzz saw are too well known to be further mentioned. On March 11, 1872, he came into the world at Huron, Ohio. As the sole inventor, at the landlady's expense, of leaving a bright light burning in his room when he is out at night, to let the inquisitive know how he spends his evenings, he is doomed to eternal fame. It's strange he hasn't flunked, for he has expected to every half year since 1888.

A. W. WICKS.

"The world knows nothing of its greatest men."

Bert came into existance on December 24, 1871, at Arcola, Ill., a Christmas gift to the world and to the class of '92. He is one of the most popular men in the class. Although he does not take a very deep interest in athletics, he holds the record for long walks, and may be seen any fine evening wending his way toward the car works or blast furnace. Keeps a den on south Seventh street, where the Senior Orchestral Club was wont to meet and rehearse. The club, however, has disbanded and peace reigns once again in the neighborhood.

R. L. WILSON.

"Faithful to his system he remained in a state of wise and masterly inactivity."

Robt. L. Wilson, the same yesterday, to-day and forever, was never known to be in a hurry. It takes him just so long (thirty-five minutes) to go from his room on Seventh street to the Poly, no matter if he be early or late, whether it be raining or the sun be shining. In regard to his laboratory work, it has been remarked that none in his section ever saw him work, and that on the contrary, none of the professors ever saw him idle. Wilson hails from Shelbyville, Ill., where he was born January 29, 1871. He graduated at the Shellbyville High School, attended Iowa University one year, and entered the Poly in 1889.

G. R. WOOD.

"'Tis ever common that men are merriest when they are away from home."

July 29, 1872, was the time and Martin's Ferry, Ohio, the place. At the age of five months G. R. was weaned, and eight years latter entered the public schools. When sixteen he left the grammar school and came to R. P. I., having done extra work in preparation. One year at the latter place was sufficient to show him the folly of not having a good time when possible, and since then his achievements in the sporting line have been unequaled. It is said that he has had measles, whooping cough, mumps, pneumonia, typhoid fever and toothache, but has escaped small pox, consumption and ear-ache. His auburn locks are the envy of the fair sex.

J. C. YOUNG.

"With the introduction of this character the plot reaches its climax."

Charlie was born at Davenport, Iowa, July 5, 1870. He entered the public schools at five and the High School at fifteen years of age. After doing extra work during the last year at the latter place he joined us in September, '89. Since coming to R. P. I. he has been noted for his studious habits and orderly deportment. As a college umpire his fame will be lasting. Has succeeded in captivating the hearts of several fair maidens of Terre Haute, one of whom threatened to dye her hair red in his honor. He plays the alarm clock at meetings of the Senior Orchestral Club.

Ode to the Senior.

SWALLOWED up in gulfs of tho't—
Eyes are fixed—on—who knows what?
We but know he sees us not.

Haply, even as we prate
Of him *here*—in astral state—
Or jackastral—he, elate.

He, occult and psychic, may
Now be solving why to-day
Is not midnight.—But away

Cease vain queries! Let us go!
Leave him all unfathomed.—Lo,
He can hear his whiskers grow!

ADAPTED FROM RILEY

Thesis Drawings.

Bixby, Allen S.	Diagraming Apparatus for Testing Machine.
Boyles, Thomas D.	Hendey Shaper.
Davis, W. J.	Symonds Rolling Machine.
Dietrich, A. M.	Steam Hammer.
Ehrsam, W. J.	Valve Gearing of the Hamilton Corliss Engine.
Fogarty, W. J.	Hydraulic Press.
Folsom, E. F.	Standard Low Truck.
Frank, Sigmund.	Blakey Emmott Alternater.
Hussey, Warren.	The United States Dynamo.
Laux, E. C.	The Hamilton Corliss Engine.
Layman, W. A.	The Backus Gas Engine.
Oglesby, M. L.	Thomson-Houston Arc Lamp.
Ott, Claude.	250 Horse Power Westinghouse Generator.
Putnam, B. R.	Valve Gearing of the Reynolds Corliss Engine.
Rock, S. M.	No. 1 Boiler, Rose Polytechnic Shops.
Rose, L. S.	Roof Truss.
Sperry, H. B.	Steam Hammer.
Tinsley, S. B.	Bridge Deflection Recorder.
Tippy, B. O.	Circular Saw Mill.
Wetherbee, H. L.	United States Dynamo.
Wickham, W. M.	Perret Dynamo.
Wicks, A. W.	Hydraulic Wheel Press.
Wilson R. L.	Wood Arc Dynamo.
Wood, G. R.	Gas Exhauster.
Young, J. C.	Crocker-Wheeler Moter.

Theses.

Study of the Time Element of Magnetism.

CLAUDE OTT, B. O. TIPPY

The work of this thesis includes the following problems:

Study of time rise of current in inductive circuit, from which are deduced curves of inductance, permeability, magnetic flux, hysteresis, &c.

Study of transformer action under varying conditions of impressed e. m. f., period of alternation and load on secondary.

Study of the effect upon magnetic field of different air spaces and different lengths of iron in circuit; application of results to the designing of dynamos, &c.

The current and field are recorded simultaneously upon a chronograph which gives the time component; the constants of the recording apparatus are determined by calibration with known values of field and current. With these instruments curves can be taken in a few seconds which ordinarily require several hours of laborious calculation.

The Efficiency and Capacity of Boiler No. 1., R. P. Shops.

H. L. WETHERBEE, S. M. ROCK.

The principal object of this test was to determine the capacity of this boiler for generating steam, and in doing this the amount of water evaporated per pound of coal used was the most important thing to be determined. The coal ash and water were all weighed and an analysis of the flue gases made. The pounds of coal burned and pounds of water evaporated are used as coördinates of a curve showing the relation between economy and capacity. The test was run for six days, ten hours each day.

The Construction and Testing of a New Belt Dynamometer.

J. C. YOUNG, SIGMUND FRANK, B. R. PUTNAM.

The work of this thesis may be divided into two parts: First, the designing and construction of the dynamometer. Second, the thorough testing and calibration of the same. The machine depends upon the principle that a belt, which is doing work on a pulley, will "creep" in passing around that pulley, and that this "creep" is proportional to the load. The belt comes to the pulley under small tension and leaves it under great tension, and since leather is elastic, it elongates. It is this elongation, as shown by the difference in velocity of the belt on striking and leaving the pulley that is measured. The measurement is accomplished by running two small wheels upon the belt at its points of contact with the pulley, reducing the motion of the wheels by means of a system of worms and gears and measuring their difference of velocity by a dial and pointer, the dial being run by one and the pointer by the other small wheel. The second part includes the testing of the dynamometer with known loads and the measurement of the elasticity of the belts used, to find whether the observed elongation corresponds to the known load. This is done under different conditions and with different belts, the idea being to determine the accuracy and practicability of the machine.

Test of a Perret Dynamo.

W. M. WICKHAM.

The machine is of the multipolar form, and the one experimented upon was compound wound and rated at 10 horse power with 65 amperes at 110 volts.

The experiments were carried out under the following classification: First, general discription, including electrical and mechanical dimensions of parts. Second, determination of the characteristic curves for both compound and shunt wound, and at different voltages. Third, efficiency, and fourth, magnetic loss.

Experiments upon a "Clerk" Gas Engine.

A. M. DIETRICH, W. J. FOGARTY, W. A. LAYMAN.

The work involves the determination of efficiency for various mixtures of gas and air, varying from ratios of 1 to 5, to 1 to 15 or 16. The gas is measured by means of a large meter, and the air by means of a novel drum designed and calibrated for this purpose. The test of each proportion of gas and air continues through twenty minutes and includes the reading of the temperature of the gas, air, in and out-going water, exhaust smoke, measurements of the flow of water through the engine jacket, taking of indicator cards, reading of brake on fly-wheel for brake horse power, and a chemical analysis of the original gas and also of the exhaust smoke. In each test the heat of combustion in the cylinder equals that in the exhaust, plus heat in the water, plus heat in the unburned gases, plus the indicated work, plus radiation. All of these quantities are to be computed.

The Effect of Temperature on the Strength of Materials.

A. S. BIXBY, G. R. WOOD.

The investigation with which this thesis concerns itself was suggested by Professor W. A. Noyes, and is confined to experiments on wrought iron and different grades of steel. The elastic limit and breaking strength of each specimen will be determined at three temperatures, viz.: 100°, 228° and 334° centigrade. The elastic limit will also be determined at ordinary temperature, say 20° centigrade. For obtaining the desired temperature of specimen, a cylinder will be used into which the specimen will be screwed, and the cylinder filled with the proper substance for obtaining the desired temperature; for instance, melting tin for 228°, melting lead for 334° C. Results thus far obtained show a decrease in elastic limit with temperature, but the effect on breaking strength has not yet been determined.

Investigation of Bridge Deflections.

S. B. TINSLEY, L. S. ROSE.

For this work a special machine was designed for recording the three motions of the bridge. The machine as designed and constructed consists of three sets of levers, which are fastened to the pin at the panel points. Each set of levers takes the motion for which it is designed and transfers it to a moving paper, which runs upon a set of rollers. The three motions thus obtained are entirely independent of each other. Three other levers connected with electro-magnets record the position of the train and also the time taken in crossing the spans. The experiments were performed upon the Vandalia railroad bridge, cards being taken for almost every train that passed. A switch engine was also obtained, and run at different rates across the span. By this means data was obtained for the same with varying speeds. From the records thus obtained the position of the load giving the maximum deflection is found, and the stresses in the members due to this position of the load is calculaated. The unit stress for each member is then determined, and the theoretical deflection computed. A comparison is then made between the actual and the computed deflections.

Efficiency Test of Westinghouse Compound Engine.

E. F. FOLSOM.

A complete test of the Westinghouse compound engine was made under different conditions of steam pressure and different loads. The test was divided into two parts, the first without and the second with, the use of the condenser. Each test was divided into periods of fifteen minutes each, in which three indicator cards and three readings of speed, calorimeter, weight of water, vacuum indicated in condenser, etc., were recorded. The load was applied by means of a rope brake, and was increased from zero to maximum load by steps of five horse power.

Effect of Insulation on the Resistance of Wires.

A. W. WICKS, E. C. LAUX.

It is well known that the resistance of wires rises with increase of temperature and this fact is the basis of the experiments made. The wires used in the experiments are about a yard long and are placed in circuit with an ammeter and connection made at the terminals of the wire to a sensitive Thompson Galvanometer which is used as a voltmeter. The readings of the ammeter are controlled by a rheostat and the readings on the voltmeter correspond to certain readings on the ammeter. A series of readings are taken first with the bare wire then with the same wire covered with tape; then with another thickness; then with the wire and two coverings blackened. Another wire of a size larger is then taken and treated in the same way. The covering of tape was found to give a cooling effect on all the wires up to a certain point which is reached when the increase of radiating surface is counterbalanced by the poor conductivity of the insulation.

An Experimental Study of the Lighting Plant at The Terre Haute.

M. L. OGLESLY, H. B. SPERRY.

The plant consists of two Jenny dynamos, each driven independently by a Payne high speed engine. The dynamos are shunt wound and of thirty-five horse power, or 350 lights capacity each. Experiments were made to determine the electrical and commercial efficiencies of the dynamos under different loads, and their characteristic curves. To obtain the work given to the dynamos indicator cards were taken, the friction of the engine under different loads having been previously obtained by a brake test.

Test of Strengths of Wood.

WARREN HUSSEY.

Six specimens each of cherry, hickory, locust, sycamore, oak, white and yellow pine and poplar will be used. A diagram is obtained from each specimen, and from this will be calculated Young's Modulus, Limit of Elasticity and Point of Fracture. A comparison of the results obtained from each variety of wood will be made.

Experiments on Alternate Currents.

W. J. DAVIS, T. D. BOYLES.

The following is a description of the apparatus used. Two contact rings, each connected to a brass arm, are fitted on the end of the armature shaft, the whole being insulated with rubber bushing. Each of these arms makes connection with a steel spring carried by a brass plate screwed to the top of a rubber pillar, which, in turn, is fitted to a loose gear acted on by a worm. A wheel fitted to the worm is graduated to read $\frac{1}{1000}$ of a revolution. Now, if one contact ring is connected by a brush to one pole of the armature and an electrostatic volmeter is placed in circuit with the corresponding steel spring and the other terminal of the dynamo, the e. m. f. for a given point in the revolution of the armature can be obtained. By taking a sufficient number of points the curve showing the variation of e. m. f. in one complete revolution can be determined. If now a transformer be placed in the circuit and the secondary connected in like manner to the other contact ring and spring, a corresponding curve for the secondary is obtained, giving the fall of e. m. f., angle of lag, etc. Again, by shunting the second ring and spring around a known non-inductive resistance, a current curve is obtained, and by comparing this with the primary e. m. f. curve, the inductance, hysteresis and magnetic lag

can be calculated. Experiments will be made to determine the e. m. f. and current curves for both the primary and secondary circuits of the transformer, 1st, when the scondary is open, and 2nd, when it is closed. The currents in the secondary will be varied from 0 to 80 amperes and the effect of different speeds of the dynamo determined. Also the characteristics and efficiency of the transformer will be caculated.

Comparison of Various Methods for the Measurement of Hysteresis.

R. L. WILSON, W. J. EHRSAM.

According to Ewing's theory of magnetism the molecules composing the iron of an electro-magnet turn themselves in particular directions, corresponding to the direction of the current in the exciting circuit. This readjustment of the molecules necessitates the expenditure of a certain amount of energy which is necessarily lost so far as outward effects are concerned. This loss has been called Hysteresis. In the cases of transformers, armatures, etc., under the influence of rapidly alternating currents, this loss is often very large and makes itself manifest in the rapid heating of the iron.

Owing to the importance of this factor in the designing of transformers and of alternate current apparatus in general, it is desirable that it should be capable of exact calculation beforehand. It was with this in view that the experiments on hysteresis were undertaken. One method used was to take simultaneous, wattmeter, and voltmeter, and speed of alternation, readings on the primary of a small transformer, also a voltmeter reading on seeondary. These readings, together with the size of core, ratio of windings, etc., of the transformer furnish data for the calculation of the energy sent into transformer and also the energy gotten out. The

difference of these quantities, minus the loss due to the resistance of wires, gives the loss due to hysteresis.

Another and somewhat novel method of procedure undertaken, is to calculate the hysteresis loss in a transformer from the potential and current curves of the primary and secondary circuits of a Westinghouse alternator. The curves of potential and current being plotted on the same line, the difference of the area of the curves caused by the lag of the current behind the e. m. f. shows the loss due to hysteresis. This loss being calculated may again be plotted to its true scale and the value read off directly.

This hysteresis loss has been found by Steinmitz and others to be expressed by the equation $H = a\ B^{1.6}$, where H is the hysteresis loss; a a constant depending on the material; B, the magnetization. The correctness of this formula has been questioned, and it is hoped by the comparison of several methods of measurement to obtain a formula as nearly correct as possible.

Our Departed.

Remembrance! Celestial present, shadow of the blessings which are no longer! Thou art still a pleasure that consoles us for all those we have lost.

Freshman Year.

John P. Baldwin,
Edward J. Barnett,
Ira Calder,
John W. Cooper,
Samuel H. Fechheimer,
Thomas M. Gardner,
Maynard M. Grimes,
William Hartman,
Ezra R. Hendricks,
Hamilton S. Hennen,
Charles A. Heyck,
Samuel Hollingsworth,
Jesse D. Lyon,
Samuel M. Matthews,
Willard T. Mattison,
Rea E. Maynard,
William C. Pattison,
William C. Pierce,
†Charles A. Phillips,
‡Audley H. Shirk,
Edward O. Speake,
†Charles Vosskühler.

Sophomore Year.

Edward S. Allen,
John T. Bardsley,
†Samuel S. Bowser,
J. Parker Doan,
Arthur E. Failing.
*Louis W. Fox,
Frederick Freers,
Joseph Freiburger,
Oscar M. Fulwider,
William Gilmore,
Karl Hanson,
Samuel H. Martin,
Harry N. McEwen,
Simon O. Rosenfield,
Taylor W. Ross,
†Harry R. Sanderson,
Edwin E. Schneider,
§Edward P. Soper,
William H. Stanton.
Charles K. Stieg,
Robert Symmonds,
Irving Usner,
John A Vogleson,
†Lewis H. Wymond,
†James C. Woodbury,

Junior Year.

Maurice E. Becker,
Rollin H. Buntin,
John P. Butts,
Frank V. Cook,
Duff Green,
Edwin T. Hulman,
Theodore H. Hulman,
Robert E. Johnson,
John R. Leighty.
Walter Mills,
Elmer F. Norton,
Ashley P. Peck,
Frank B. Stratford,
George E. Talley,

Senior Year.

Renick S. Matthews.

‡ Died, Oct. 4, 1889. § Died, April 28, 1890. * Died, Jan. 12, 1890. † Married.

In Memoriam.

AUDLEY H. SHIRK.

DIED

October 3d, 1889.

LOUIS W. FOX.

DIED

January 12th, 1890.

EDWARD P. SOPER.

DIED

April 28th, 1890.

The Concert.

BEFORE entering into a description of this notable event in the musical world, it may be well to say a little in regard to its object, which was to raise money to assist in publishing this book, and its result, which was the addition of about $65.00 to the class treasury.

This book was published at the expense of three things, namely, time, labor and patience, and the first item was as clear a steal as ever hastened a man to Canada for his health. It is said that Time flies, and also seeing is believing. As we have never seen Time (excepting his supposed likeness in the almanacs), we cannot say whether he flies or rides a pneumatic; but we have for data in solving the problem, the fact that the Poly clock loses eight minutes every hour during the day, and catches up at night.

The time used by those engaged in literary efforts for this annual was appropriated from that presumably devoted to college duties and sleep. A fraction of the latter was regained, however, during lectures on machine design and mechanics.

The labor expended on this book was reduced as much as possible in intensity by its distribution over as great an area as practicable. That portion which was kindly donated the class in the line of assistance on our concert is most gratefully remembered, particularly the aid of Mrs. Allyn Adams, of this city, and others assisting on the program.

The patience expended in issuing this first annual from the R. P. I. has almost exhausted the entire stock of a great many people. We do not refer to Terre Hottentots, who enjoyed the concert so much that, during the concluding number their enjoyment was audible over the entire church. Nor do we intend casting

reflections on the modest and unassuming Normalites, who demanded the return of their money at the Nye-Burbank entertainment, because they were not given front seats with cushions at 8:45 p. m. But if you would like to know who has been worried, tired out, and "cussed" just fifteen times per day, ask the editors, ask the illustrators, ask the "committee on bill posting and other means of raising money." In fact, ask any one, from the class historian to the publishers' "devil," who has been connected in any way with the enterprise, and the unanimous answer will be, "I am the man!"

However, to return to the concert, we may say that financially it was a success; musically, it was a most glorious triumph! Barring the breaking of a few strings of the big harp from DePauw, the intense perspiration (and respiration) of our worthy class president, who kindly assisted the harp to the rear for repairs, and the erratic explorations of the second violins in the orchestra, who were evidently in search of more striking and effective parts for their instruments, all went smoothly as a Wagner opera. However, a second concert was not deemed advisable; but on account of the many other saddening and mournful influences of Terre Haute life (and weather), an entertainment of a more cheerful nature was determined on, an account of which will be found in the sweet hereafter.

Nye and Burbank.

A MAN who has won a dollar at a game of chance only has his appetite sharpened for larger gains, and will not desist until he is in some manner ruined; morally he has a screw loose when he ventures his first dollar. So it was with the class of '92. The success of the concert but whetted its desire to wedge in another "real" figure into its bank account, and a descent upon the fun-loving public was planned and executed, with the able assistance of Bill Nye and Al. Burbank. These two professional wits were kindly rented to the class by their managers, on March 22d, for two hours. It was the desire of the class that the inhabitants of Terre Haute (and the Normalites) should learn of this before the event came off, so numerous little cards, bill posters, "dodgers," and other matter of like literary merit were procured, and the good people of Terre Haute (and likewise the above-mentioned Normalites) enjoyed the rare spectacle of twenty-five dignified (?) Seniors scattering hand-bills all over the village.

The people who were thus attracted say that both the boys looked and spoke unusually well. Some difficulty was found in getting a room of a suitable size to display all of the fine points of Mr. Nye and Mr. Burbank, but Normal Hall was generously offered and accepted—thus relieving the necessity of giving an open air entertainment. That the third figure was placed before the decimal point this volume indicates.

BANQUETS

Banquets.

FOR some unaccountable reason the responsibility of instituting class banquets was left to the Class of Ninety-two. On May 1, at a special class meeting, the question of culinary tastes was agitated, and, as a result of the heated discussion, the first class supper was planned. A committee was appointed and on May 29th the class was requested to meet at 9:30 P. M., sharp, at Bindley Hall, to partake of a feast fit for the gods. Those of us who were there remember poor "Jesse D." as he lay writhing from pain on a cot of chairs, waiting for the arrival of a doctor—a warning to his classmates, who were destined to survive all the tempests and to represent him at each of the coming annuals. The following toasts were responded to:—

President's Address . . . . . W. A. Layman
The Freshmen and their Friends . . . . . W. J. Davis
The "Gusher," Terre Haute's Misfortune . . . . . S. H. Fechheimer
Freshman Athletes . . . . . W. J. Fogarty
The Literary Club . . . . . Milton L. Oglesby
Their Graves are Kept Green . . . . . J. D. Lyon
The Wheelmen . . . . . L. H. Wymond
A Voyage to Australia . . . . . C. Vosskühler
Journal Review—1925 . . . . . S. B. Tinsley
Photographers of '92 . . . . . E. T. Hulman
Edger vs. Planer . . . . . J. A. Vogleson

Violin Duet . . . . . E. C. Laux, W. J. Ehrsam
Piano Solo . . . . . Robert Johnson
Cornet Solo . . . . . C. A. Heyck

Looking back with pride on the success of our first banquet, and desiring to spread ourselves—and to be at the spread—we again decided to try our luck at the festal board. The second annual banquet occurred on the evening of March 28th,

at Sage's Cafe. Surely this, our half way supper, will ever be remembered as one of the most pleasant occasions of our lives.

THE TOASTS.

President's Address	W. A. Layman
Shocks and Sparks	E. S. Allen
Points of Piercing	H. B. Sperry
A Base Hit	E. P. Soper
Hoosier Belles	Duff Green
Sawdust to Sand	S. M. Rock
Reminiscences	S. B. Tinsley
Professor vs. Student	L. S. Rose
Surprises	A. M. Dietrich
Technical Telegraphers	A. P. Peck
Class Rhyme	W. J. Davis

Our third annual banquet was upon us before we were aware, but true to the spirit of the Juniors, we had no antipathy for the annual,—the semi-annual being the most disliked. Accordingly, on February 13th we found ourselves seated under brilliant incandescents, participating in another feast, made lively with the following

TOASTS.

President's Address	W. A. Layman
Plugs and Pluggers	R. L. Wilson
Class Gags	M. L. Oglesby
Ways and Means	A. W. Wicks
Polyisms	J. C. Young
Mademoiselle and Fraulein	Warren Hussey
Short Sports	T. D. Boyles
From Strumk to Eddy	F. B. Stratford
"Tackle Low,"	W. J. Fogarty
Class Rhyme	E. F. Folsom

Although our former banquets had been very delightful, yet none was so pleasant as the complimentary one which we tendered the class of '91—as per custom established by the class of '90. It was here that we vied with each other in reviewing the noble deeds done by our respective classes; it was here that

we wiped out the ill feeling which always exists between Senior and Junior. Nothing was left undone to make the affair a memorable one in the histories of both classes. After paying our respects to each other behind the veil of toasts, we made our program lively to keep us merry until the small hours of the morning.

Welcome . . . . . W. A. Layman, '92
On the Campus . . . . . Abe Balsley, '91
Mechanique Celeste . . . . . R. L. Wilson, '92
Class of '91 . . . . . W. S. Menden, '91
Remonstrances . . . . . L. S. Rose, '92
From Olney to Rankine . . . . . H. B. Jones, '91
Generators . . . . . Claude Ott, '92
Across the Ocean . . . . . J. S. Cox, '91
Class of '92 . . . . . W. J. Davis, '92
Thesis . . . . . E. F. McCabe, '91
Scraps and Scrappers . . . . . Sigmund Frank, '92
The Ladies . . . . . F. W. Hurlbert, '91
Our Team . . . . . S. B. Tinsley, '92
The Faculty . . . . . William Boehm, '91
Spins . . . . . A. P. Peck, '92
Farewell . . . . . O. C. Mewhinney, '91

As we entered upon our Senior year, we felt that our days at the "Poly" were indeed growing short.

Whatever our future may be, we will retain the memory of the "bench mark" which we established on May 29, 1889. We have reached the top of the hill; is it not meet that we should turn our level back upon the established "bench mark" and try to smooth away the cares and struggles of a four years' course? How could this have been better done than by meeting around the supper tables and reviewing the past or picturing bright and pleasant futures for each other? No destroying bowl was there to drive away our cares, but instead our spirits were kept in cheer by the following

TOASTS.

President's Address . . . . . W. A. Layman
Theses . . . . . M. L. Oglesby
Machine Designing . . . . . B. O. Tippy
The Ladies . . . . . H. L. Wetherbee
After Dark . . . . . A. S. Bixby
Der Lichtbogen . . . . . B. R. Putnam
Our Dead Ball . . . . . T. D. Boyles
Throttle Valves . . . . . H. B. Sperry
Rise and fall of the Moustache . . . . . W. M. Wickham
Reflections . . . . . S. M. Rock
Syllogisms . . . . . R. L. Wilson
Poem . . . . . W. J. Davis
Maximum Load . . . . . G. R. Wood
Our Future . . . . . S. S. Frank